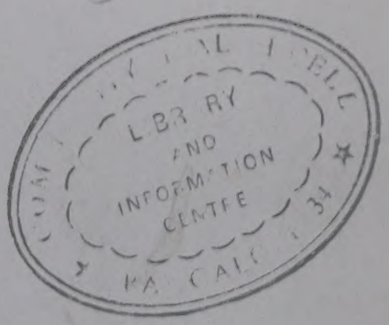
Atlas

MENTAL HEALTH RESOURCES IN THE WORLD 2001

World Health Organization
Geneva



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MENTAL HEALTH RESOURCES IN THE WORLD 2001

Mental Health Determinants and Populations
Department of Mental Health and Substance Dependence
World Health Organization

Geneva

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Atlas is a project of WHO Headquarters, Geneva, supervised and co-ordinated by Dr Shekhar Saxena. Technical support is provided by Dr Pallab K. Maulik (overall project management) and Ms Kathryn O'Connell (data analyses). Dr Derek Yach and Dr Benedetto Saraceno provide the vision and guidance to this project.

Key collaborators from WHO Regional Offices include: Dr Custodia Mandlhate, African Regional Office; Dr Caldas de Almeida and Dr Claudio Miranda, Regional Office for the Americas; Dr Ahmad Mohit and Dr Khalid Said, Eastern Mediterranean Regional Office; Dr Wolfgang Rutz, European Regional Office; Dr Vijay Chandra, South-East Asia Regional Office; and Dr Helen Herrman and Dr Gauden Galea, Western Pacific Regional Office. They have contributed in planning the project, obtaining and validating the information from Member States and reviewing the results.

WHO Representatives and Liaison Officers in WHO Country Offices were responsible for collecting and validating information received from governments.

Ministry of Health officials in Member States provided the information and responded to the many requests for clarifications arising from the data.

A number of experts in countries assisted the ministries in locating and providing the information. They also provided relevant literature and reports to support the data.

A number of colleagues at WHO have provided advice and guidance during the course of the project. Significant among them are: Dr Srinivasa Murthy, Ms Meena Cabral de Mello, Dr Thomas Bornemann, Dr Itzhak Levav, Dr José Bertolote, Dr Michelle Funk, Dr Maristela Monteiro and Dr Leonid Prilipko.

Ms Jeanie Bliss and M. Glenn Thomas assisted in updating the database and its validation during their internship in the Department. Ms Marie-Helene Schreiber, Ms Rosa Seminario and Ms Elmira Adenova assisted in translation of responses from countries.

Ms Clare Tierque and Ms Rosemary Westermeyer have provided administrative support.

The contribution of each of these team members and partners, along with the input of many other unnamed people, has been vital to the success of this project.

The publication of this volume has been assisted by Ms Linda Merieau (production), Ms Tushita Bosonet (graphic vision), M. Steve Ewart and M. Christophe Grangier (maps), Ms Helen Green (editorial) and the NMH Communications team (media and communications).

As the world becomes increasingly aware of the massive burden associated with mental disorders and takes steps to expand and improve mental health care, the need for accurate and up-to-date information is crucial. Information is required in two distinct areas: the disease burden and the available resources.

Many decades of work have resulted in substantial information on the extent and burden of mental diseases. This includes information on how to obtain reliable and valid diagnoses; studies on the incidence, prevalence and course of disorders; national and international classification systems; and estimates of associated disability. However, very little is known about the resources available to respond to this burden. What resources exist within countries for mental health care? How do the resources compare to the needs? Where are the significant gaps? What are the differences across regions and income groups of countries? While these questions are asked frequently, there have been no clear answers. What is known about mental health resources pertains only to a few developed countries. There is almost no information from the vast majority of countries. Because studies have used different units of measurement, the information that is available is not comparable across countries.

The World Health Organization launched Project Atlas in 2000 to address this gap. The objectives of this project include collection, compilation and dissemination of relevant information on mental health resources in countries. The project is designed to obtain real information from each country rather than to extrapolate based on what is known from a few countries. Within one year of its conception, we are pleased to present the first product of this project. This volume contains the initial set of data collected by the Atlas project. It provides global and regional analyses on mental health resources data collected from 185 countries, covering 99.3% of the world population. This information has been gathered primarily from governmental sources within each country, making this one of the most comprehensive and authoritative compilations of mental health resources ever attempted.

Atlas data confirm what many mental health professionals have known for a long time– that mental health services are grossly inadequate compared to the need for mental health care in most countries. The value of Atlas however is to replace impressions and opinions with facts and figures. Atlas data not only give a clear picture of the existing resources and crucial needs in countries around the world, but also provides a baseline for monitoring changes over time. By following uniform definitions and units it allows for comparisons across countries and regions.

How can the Atlas data be used? Atlas data should drive the global and national mental health programmes. At the global level, the data will help make the world more aware of exactly how deficient mental health resources are and provide an impetus to international efforts to enhance these resources. At the national level, the analyses identify areas that need urgent attention by health planners and policy-makers within countries. Atlas also sets realistic targets by allowing comparison across countries. WHO hopes that the stark realities depicted by Atlas will motivate all those who value mental health to act now for improving mental health resources. The picture is clear and the goal is entirely within reach.

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Mental disorders account for a substantial proportion of disease disability and burden, yet current resources for mental health are not adequate. The burden associated with mental disorders is projected to increase over the coming years. The quality and quantity of mental health resources need to improve to meet the current and future needs. Accurate information on existing resources is essential to bring about this improvement.

It is indeed a paradox that though substantial information is available on the incidence, prevalence, course, diagnosis, classification, disability and burden of mental disorders, hardly any information is available on the resources that exist to respond to this burden. The information that does exist cannot be compared across countries because reports use varying definitions and units of measurement. This imbalance between "disease information" and "resources information" is a major impediment to planning mental health services. Lack of information on resources also hampers efforts made by non-governmental organizations, professional associations and consumer groups to demand improvement of mental health care services and to highlight specific needs.

In order to fill this crucial gap, the World Health Organization launched Project Atlas in 2000. Atlas aims to collect, compile and disseminate relevant information on mental health resources in the world.

In the first phase of this work, relevant information has been obtained from the Member States of WHO and is being presented in this volume "Atlas: Mental Health Resources in the World". The information was collected in a stepwise method. In the first step, consultations were held with Regional Offices to identify areas where there was a need to collect information. A questionnaire was then drafted along with a glossary of terms. This draft questionnaire and the glossary were reviewed by selected experts. The questionnaire was piloted in one developed country and one developing country, and necessary changes made. The English questionnaire and glossary were then translated into four languages – Arabic, French, Russian and Spanish.

In the second step, the questionnaire and glossary were sent to the focal point for mental health in the Ministry of Health of all Member States through the Regional Offices and WHO Country offices. The focal points were requested to complete the questionnaire based on all possible sources of information. They were requested to follow the glossary definitions closely to maintain uniformity and comparability. The Atlas Project team responded to all questions and requests for clarification. Regular reminders were sent to those who did not return the completed questionnaire on time. Countries providing incomplete information or information that appeared internally inconsistent were requested to provide clarification. Supporting documents (e.g. copy of policy or legislation document) were requested to accompany completed questionnaires.

In the third step, all the available information was entered into an electronic database using suitable codes. Analysis of the data was then conducted using SPSS version 9.0. Values for continuous variables were grouped into categories based on distribution. Frequency distributions and measures of central tendency (mean, medians and standard deviations) were calculated as appropriate. Countries have been categorised by WHO Regions and by World Bank income groups based on GNP per capita (World Bank, 2000). Population figures were taken from The World Health Report 2000, (WHO, 2000).

This publication gives analyses of data for 185 countries. The data is organized by 16 broad themes. These themes are presented in the following pages. Each theme occupies two pages. The right page gives a graphic display of the available data. The accompanying left page gives the related text. Graphic displays include maps of the world that give the relevant country data coded by colour. Bar and pie charts are given to illustrate frequencies, medians and means as appropriate. Regional maps show aggregate figures by WHO Regions. Definitions for the terms used while collecting the information are provided for each theme. Selected findings from analysis of data around that theme are described. No attempt has been made to describe all the possible results arising out of data analyses presented; only the salient findings are mentioned. Limitations to be kept in mind when interpreting the data and their analyses are described. Some implications of the findings for further development of mental health resources are given.

The annex to this publication contains summary tables of country specific data for selected variables. A separate table gives data from Associate Members and Areas of WHO; these data are not included in the aggregate analyses.

While all attempts have been made to obtain the required information from all countries, some countries have not been able to give information on certain themes. The extent of missing data on each theme is indicated by giving the number of countries whose data are included (N) with the individual charts against the total number of 191. The most common reason for the missing data is that such data simply do not exist within the countries. It is hoped that these information gaps will be filled in the near future. While all possible measures have been taken to compile, code and interpret the information given by countries using uniform definitions and criteria, it is possible that some errors may have occurred. WHO requests the mental health focal points within the Ministries of Health of Member States to point out any errors, for correction in subsequent publications.

References:

1. World Bank (2000). http://www.worldbank.org. Accessed in December 2000. World Bank Group. Washington D.C.
2. World Health Organization (2000). The World Health Report 2000: Health Systems. Improving Performance. WHO. Geneva.

The Atlas data show that the aggregate resources for mental health in the world are grossly inadequate compared to the burden associated with these disorders. In addition, there are large disparities across regions and income groups of countries, with low income, developing countries having extremely meagre resources.

In the area of mental health policies, programmes and legislation, 40% of countries have no policy, 30% have no programme and 25% have no legislation. While policies and programmes are particularly lacking in African and Western Pacific Regions of WHO, legislation is relatively deficient in the Eastern Mediterranean Region. The majority of policies, programmes and legislation are relatively recent, most having been developed after 1990. Almost 37% of countries have no community care facilities for mental health. In South-East Asia, Eastern Mediterranean, and African Regions, there are no facilities for community care in mental health in about half of the countries.

A large majority of countries have a therapeutic drug policy or an essential list of drugs, but the availability of psychotropic drugs in primary care is not consistent. About 20% of countries do not even have the three most commonly prescribed drugs to treat disorders like depression, schizophrenia and epilepsy. Where these drugs are available, high prices are often a barrier to care. Though low income countries have lower median prices, the difference in prices between low and high income countries is only 2 to 5 times while the difference in their income level is more than ten times, making these drugs relatively less affordable in low income countries.

Twenty-eight percent of countries report not having a specified budget for mental health. Where budgets do exist, they represent only a small proportion of the total health budget. Thirty-six percent countries, of those providing information, reported spending less than 1% of the total health budget on mental health. Budgets are particularly low in the African and South-East Asia Regions. Lower income countries also have a proportionately lower mental health budget. This puts mental health in these counties at even a greater disadvantage. Common methods of financing mental health care are tax-based funding, social insurance and out-of-pocket payments. Out-of-pocket payments put excessive and unplanned burden on families, especially in low income countries, and are particularly common in the African, South East Asia and Eastern Mediterranean Regions. Private insurance plays a very minor role, if any, in mental health care financing in all Regions.

Though 87% of countries have identified mental health as an activity in primary care level, treatment facilities for severe disorders are available in only 59% of countries. Regular training of primary care personnel takes place only in 59% of countries.

The median number of psychiatric beds available in the world per 10000 population is 1.6, with 65% of these beds in mental hospitals. More than 40% of countries, covering about 65% of the world's population, have access to less than one psychiatric bed per 10000 population. Beds are particularly deficient in the African and South-East Asia Regions.

The availability of specialized personnel is also poor. There is only one psychiatrist and one psychiatric nurse per 100000 population in 53% and 46% of countries respectively. This deficiency is particularly evident in the Regions of Africa, South-East Asia, Western Pacific and Eastern Mediterranean. Though countries in the European Region and the Region of the Americas have more personnel, the distribution of resources across all the countries in the regions is not uniform. The availability of psychologists and social workers working in mental health is also poor with median numbers 0.4 and 0.3 per 100000 population respectively for these professionals among all countries.

Mental health programmes for special populations are also scarce. Programmes for children and elderly are present in only 60% and 48% of countries respectively, though they form a substantial proportion of the total population. Non-governmental organizations in mental health are reported to be active by 88% of the countries.

Mental health monitoring systems are important tools in assessing the overall mental health situation of a country. However, mental health reporting is not done by 27% of countries and data collection or epidemiological studies are absent in 44% of countries. Again low income countries lag behind in this respect.

Overall, the picture that emerges for mental health resources in the world is highly unsatisfactory. The availability of most resources is poor and their distribution is highly uneven. A substantial improvement in mental health resources is needed urgently to respond to the existing and increasing burden of mental disorders.

The following pages present the results of Project Atlas by themes

Definitions

- *Mental health policy:* a specifically written document of the government or Ministry of Health containing the goals for improving the mental health situation of the country, the priorities among those goals and the main directions for attaining them.

Mental health policy may have the following components:

- *Advocacy:* a combination of individual and social actions designed to raise awareness and to gain political commitment, policy support, social acceptance and health systems support for mental health goals.
- *Promotion:* a process of enabling people to increase control over the determinants of their mental well-being and to improve it.
- *Prevention:* all organized activities in the community to prevent occurrence as well as the progression of mental disorders, including the timely application of means to promote the mental well-being of individuals and of the community as a whole, and the provision of information and education.
- *Treatment:* relevant clinical and non-clinical care aimed at reducing the impact of mental disorders and improving the quality of life of patients.
- *Rehabilitation:* care given to persons with mental disorders in the form of knowledge and skills to help them achieve their optimum level of social and psychological functioning.

Salient Findings

- A mental health policy is present in 59.5% of the countries covering 85.1% of the world's population. While in the South-East Asia Region 70% of countries have a policy, only 47.8% of the countries in the African Region have a policy.
- More than 80% of the policies have been developed after 1980, with 57.3% of the countries developing policies after 1990. Half of these were formulated in the last five years.
- In 80% of the African countries that have a mental health policy, the policy has been formulated after 1990.
- Most policies are comprehensive, with treatment covered by 97%, rehabilitation by 93%, prevention by 95%, promotion by 89% and advocacy by 80%.

Limitations

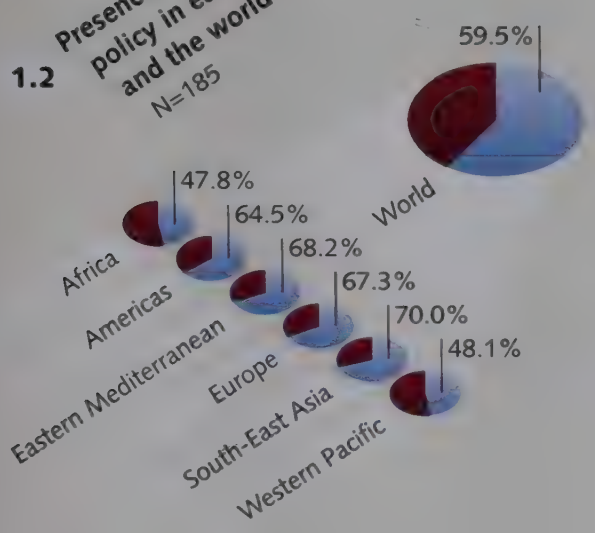
- Many countries in the European Region do not have a stated policy, but have a well-developed action plan for mental health. This may account for the reported low figure for the presence of mental health policies for the European Region.
- While some countries do not have a policy at the national level, there may be mental health policy and programmes at state or provincial levels. These have not been taken into account by the present analysis.
- Some countries, where policies were initially formulated early on, have recently updated them. The present data includes only the year of initial formulation.

Implications

- A mental health policy is essential for the improvement of the overall mental health in the country. A comprehensive policy document provides a blueprint for developing programmes and action plans. Without an overall policy on mental health care it becomes difficult to plan for the existing and future needs of a country
- Countries that do not have a policy need to develop it as a matter of priority. Formulation of policy is especially important for countries that have very few resources for mental health.
- It is also essential that the mental health policy is in harmony with the overall health policy of the country.

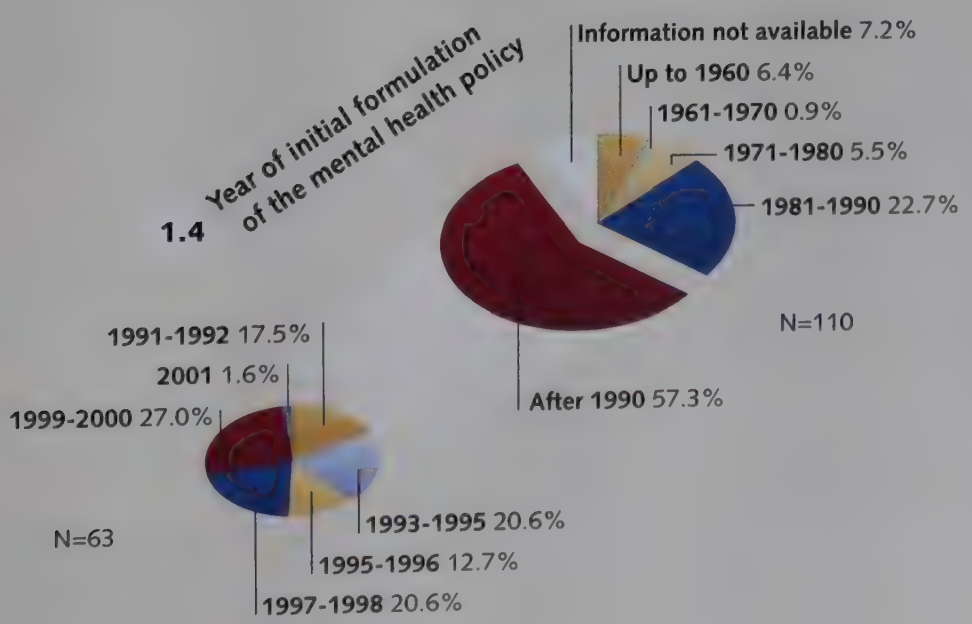
1.1 Presence of mental health policy

1.2 Presence of mental health policy in each WHO Region and the world
N=185



1.3 Presence of mental health policy in each WHO Region and the world according to population covered
N=185 (Population according to WHR 2000)

1.4 Year of initial formulation of the mental health policy



Definitions

- *National mental health programme:* a national plan of action that includes the broad and specific lines of action required in all sectors involved to give effect to the policy. It describes and organizes actions aimed at the achievement of the objectives. It indicates what has to be done, who has to do it, during what time frame and with what resources.
- *Community-based care:* any type of care, supervision and rehabilitation of mental patients outside the hospital by health and social workers based in the community.

Salient Findings

- 69.7% of countries, covering more than 92.8% of the world's population have national mental health programmes. While in the Eastern Mediterranean Region 86.4% of countries have a national mental health programme, it exists in 55.1% of countries in the European Region.
- 53.5% of the programmes were initially formulated after 1990. Of those programmes, 63.7% were formulated after 1996.
- Almost 71% of countries in the European Region with a national mental health programme formulated their programme in the last 10 years compared to 26% of countries in the Eastern Mediterranean Region.
- Though 63.4 % of the countries covering nearly 80% of the world's population have some form of mental health facilities in community care services, the quality and coverage of services varies enormously between countries.
- The Regions of South–East Asia, Eastern Mediterranean and Africa have the lowest coverage for community-based care with only about half of the countries having facilities.

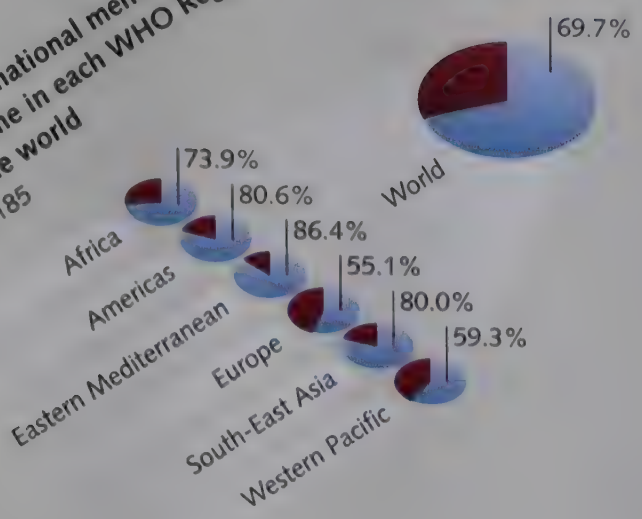
Limitations

- Some of the European countries that have reported not having a national programme have well-developed action plans at state or provincial level, that are unaccounted for in overall figures.
- The data presented here refer only to the initial formulation of the programme and not to revisions or updates.
- The information given here pertains only to existence of the programmes and not to their implementation.

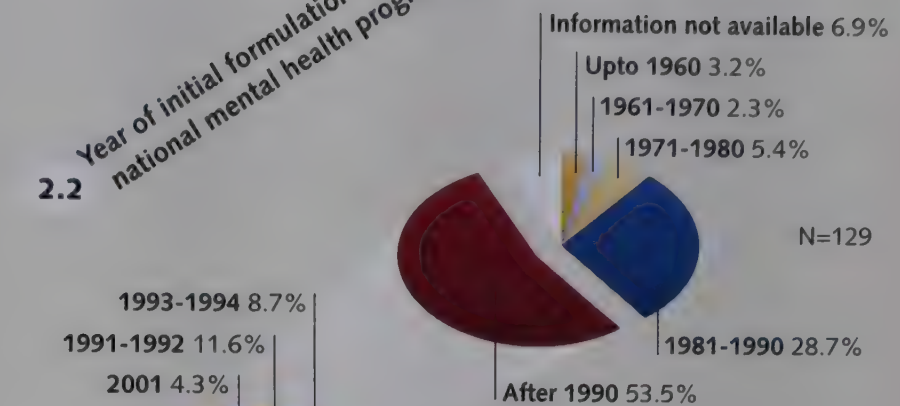
Implications

- A national mental health programme facilitates time-bound steps being taken by the country in the area of mental health. A programme is necessary especially in countries where services are grossly inadequate.
- A programme, once approved by the government, becomes a national activity and can bring with it assured financial support. This facilitates the implementation of the programme.
- Community care is widely recognized as being more effective than institutional care for chronic mental disorders. Countries need to increase the availability of community care. This is especially important for countries that need to establish new services because of grossly inadequate existing services.

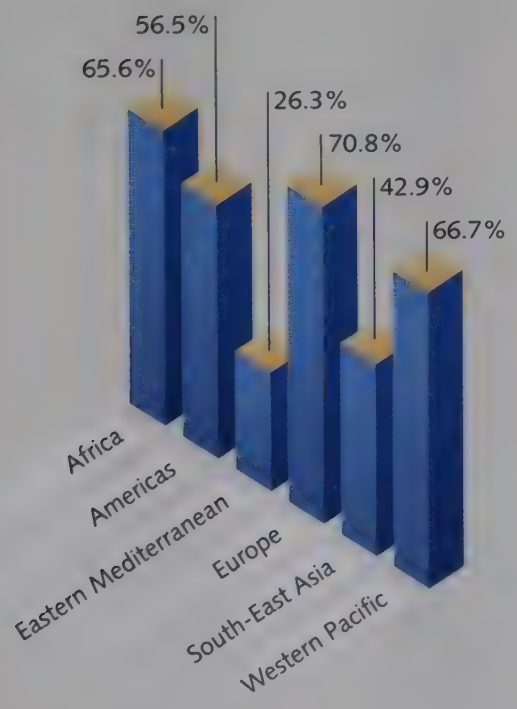
2.1 Presence of national mental health programme in each WHO Region and the world
N=185



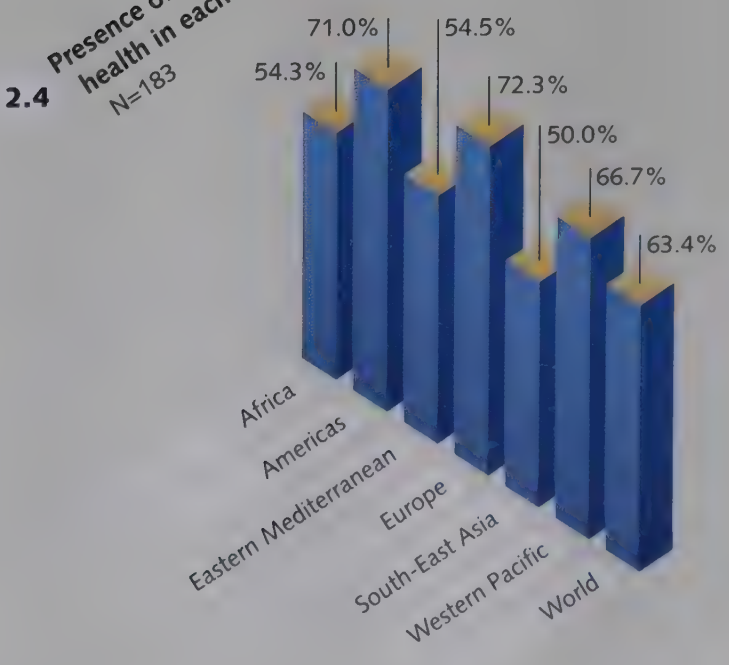
2.2 Year of initial formulation of the national mental health programme



2.3 Countries in each WHO Region with formulation of the national mental health programme after 1990
(From all countries having a national mental health programme)



2.4 Presence of community care in mental health in each WHO Region and the world
N=183



Definitions

- *Mental health legislation:* legal provisions for the protection of the basic human and civil rights of people with mental disorders. It deals with treatment facilities, personnel, professional training and service structure. Mental health legislation includes provisions concerned with the restraint and protection of individual patients, regulation of compulsory admission, discharge procedures, appeals, protection of property, etc.
- *Disability benefits:* benefits that are payable, as part of legal right, from public funds in cases of mental disorders that reduce a person's capacity to function.

Salient Findings

- A law in the field of mental health can be found in 75.3% of countries covering 65.8% of the world's population. While, 91.7% of the European countries have a law in the field of mental health, the rate is 57.1% in the Eastern Mediterranean countries.
- About 51% of the laws were passed after 1990 and of those, 66.2% were developed after 1996. In the European Region 74.4% of the countries created their latest law in the field of mental health after 1990.
- 15% of countries have laws that date back to a period before 1960, before most of the currently used treatment methods became available.
- 75.4% of the countries, accounting for 93.2% of the population, have reported some form of disability benefit for persons suffering from mental disorders. Availability of these benefits varies across regions. In the African Region only 46.5% of countries have disability benefits covering 63.4% of the population.
- Disability benefits vary from monthly monetary benefits to special retirement benefits or tax exemptions. However, the information about these benefits is not widely available and procedures for receiving them are often more cumbersome than receiving benefits for physical disabilities.

Limitations

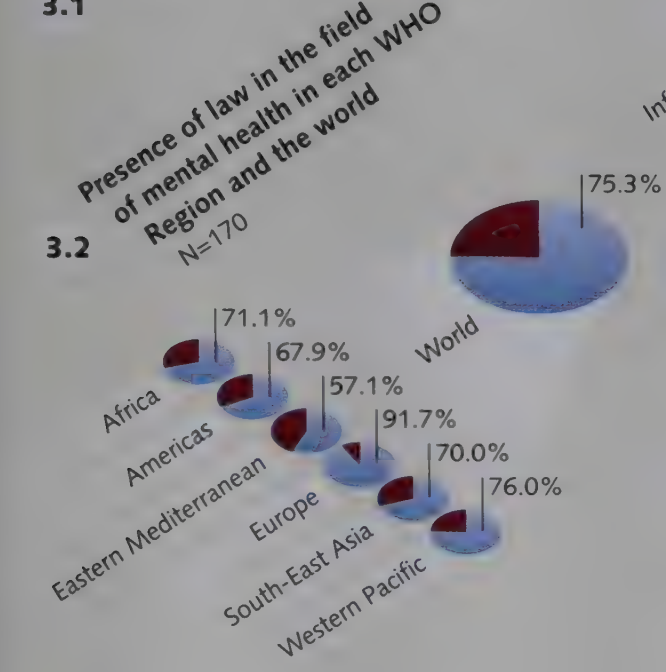
- Some countries do not have separate mental health legislation, though some issues may be covered as a part of a larger health legislation.
- Details on specific components of the laws related to mental health are not available. Some laws are comprehensive, while others cover only a few of the necessary components.
- Information on the exact kind of disability benefits and their coverage within the country is not available.

Implications

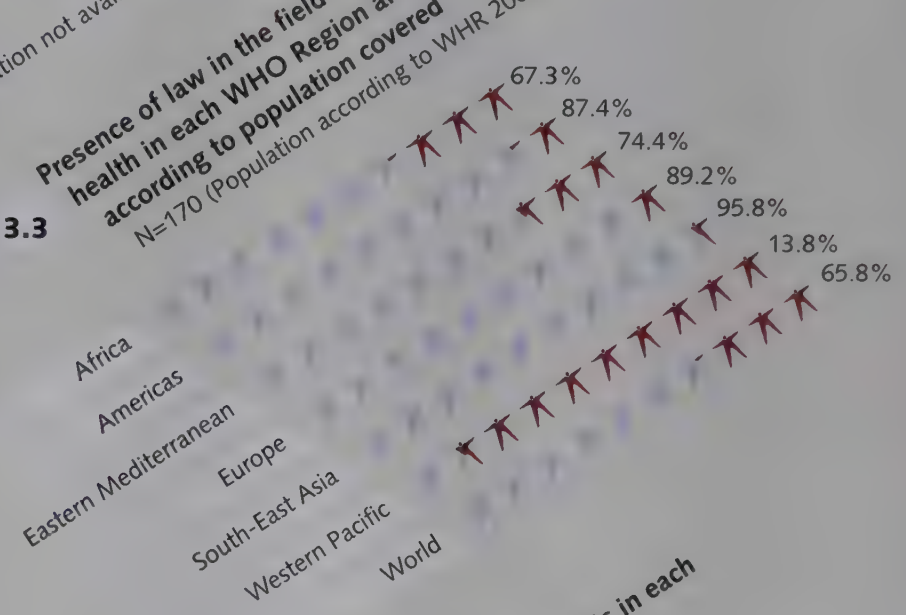
- Earlier mental health legislation was often implemented to legally deprive those suffering from mental disorders of their liberty and keep them isolated from society. These laws served more to safeguard others from "dangerous" mentally disordered than to protect the latter.
- In recent years the focus of legislation has shifted to human rights of people with mental disorders and their right for treatment. Progressive legislation is essential for care of those with serious mental disorders.
- Mental health legislation should cover parity in services, entitlements, housing and social support. These are often inadequately covered.
- Consumers of mental health services need to be involved in formulating and revising mental health legislation and disability benefits.
- There needs to be a parity between physical and mental disabilities for benefits. This is more important because mental disability is often not obvious in spite of its effects being severe and long lasting.


Presence of law in the field of mental health
Present
Absent
Information not available
WHO 01.172

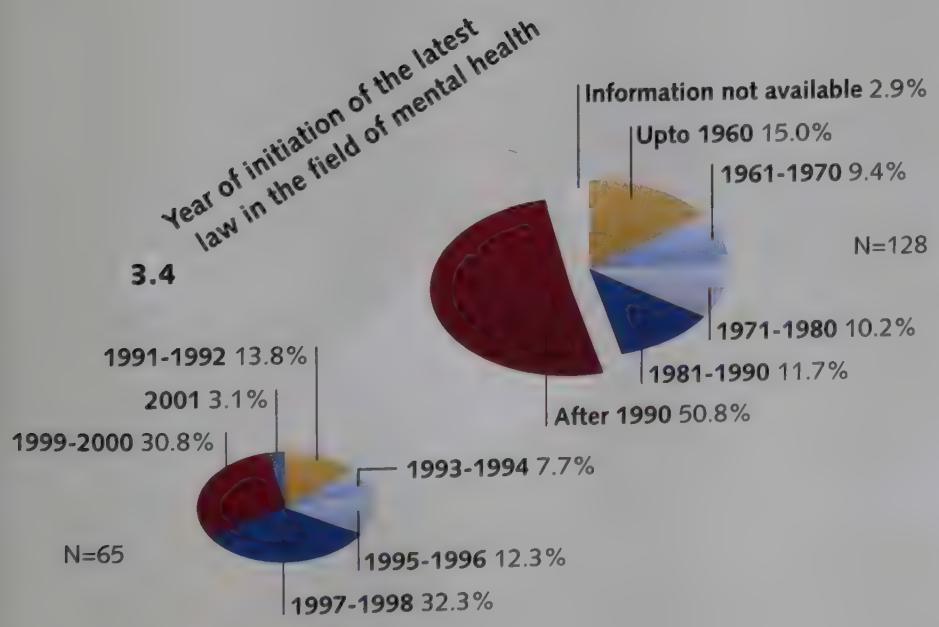
3.1


Presence of law in the field of mental health in each WHO Region and the world
N=170
75.3%
71.1%
67.9%
57.1%
91.7%
70.0%
76.0%
Africa
Americas
Eastern Mediterranean
Europe
South-East Asia
Western Pacific
World

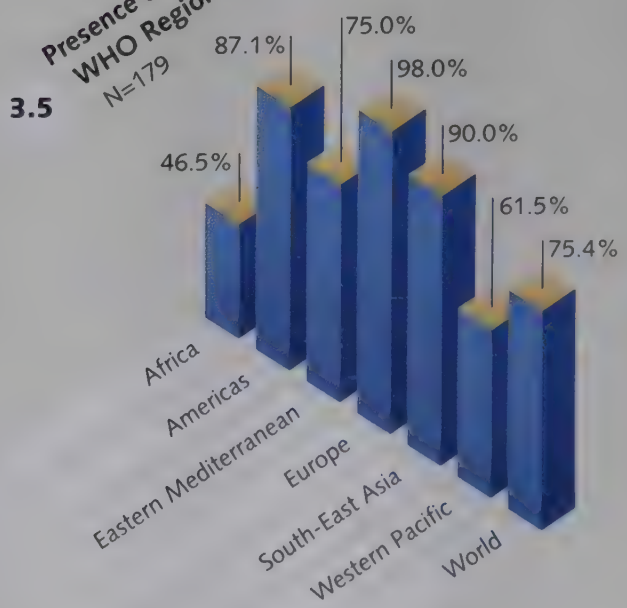
3.2


Presence of law in the field of mental health in each WHO Region and the world according to population covered
N=170 (Population according to WHR 2000)
67.3%
87.4%
74.4%
89.2%
95.8%
13.8%
65.8%
Africa
Americas
Eastern Mediterranean
Europe
South-East Asia
Western Pacific
World

3.3


Year of initiation of the latest law in the field of mental health
Information not available 2.9%
Upto 1960 15.0%
1961-1970 9.4%
N=128
1971-1980 10.2%
1981-1990 11.7%
After 1990 50.8%
1991-1992 13.8%
2001 3.1%
1999-2000 30.8%
1993-1994 7.7%
N=65
1995-1996 12.3%
1997-1998 32.3%

3.4


Presence of disability benefits in each WHO Region and the world
N=179
46.5%
87.1%
75.0%
98.0%
90.0%
61.5%
75.4%
Africa
Americas
Eastern Mediterranean
Europe
South-East Asia
Western Pacific
World

3.5

Definitions

- *Substance abuse policy:* a specifically written document of the government or Ministry of Health containing goals of prevention and treatment activities related to the use, abuse and dependence of alcohol, prescription and non-prescription including illicit drugs.

Salient Findings

- 69.4% of countries covering 77.7% of the world's population have a substance abuse policy.
- The African and Western Pacific Regions have substance abuse policies in only 52% and 54% of countries respectively, whereas, 85.7% of the countries in the European Region have substance abuse policies.
- 55.1% of the policies were formulated in the 1990s and more than 58% of those after 1996.
- In the European Region 73.8% of countries formulated policies after 1990 compared to the Western Pacific Region where 41.7% of countries formulated policy after 1990.
- Policies vary widely with some countries having a comprehensive policy and others having a policy related to one particular type of substance, e.g., illicit drugs or alcohol.

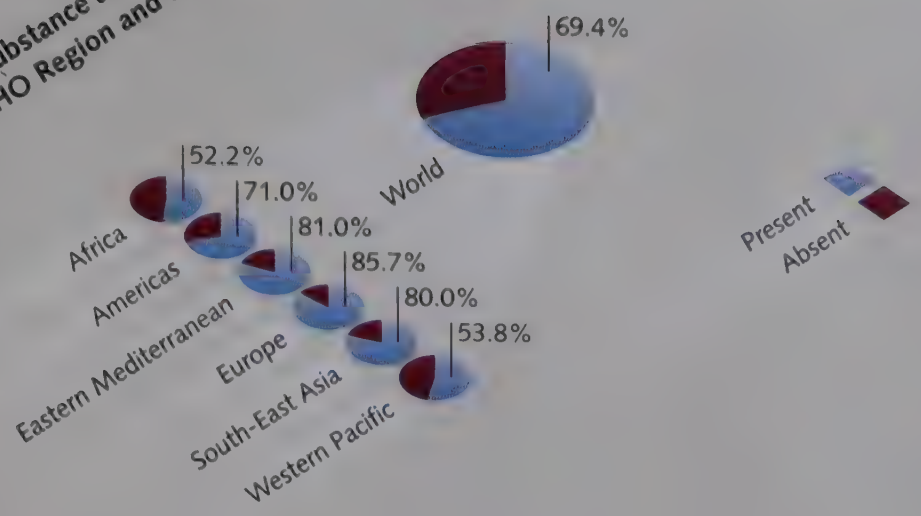
Limitations

- While some countries may have reported having no policy, they may have individual plans or programmes related to drug abuse or dependence.
- Specific details about substances covered by substance abuse policy, years of revisions of the policies and degree of their implementation are not available.

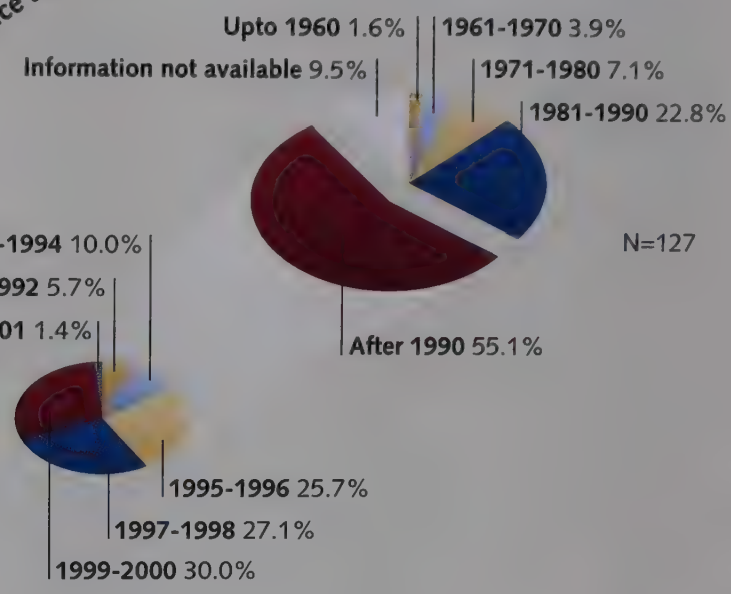
Implications

- A substance abuse policy is essential for ensuring that the activities of various governmental departments are compatible and that they contribute towards preventing problems related to use of substances.
- A substance abuse policy facilitates planning and improving the services for management of persons having substance use disorders. Priorities can be defined and resources channelled to meet those priorities.
- Substance abuse policy should be comprehensive, covering all substances including alcohol, prescription and non-prescription including illicit drugs.

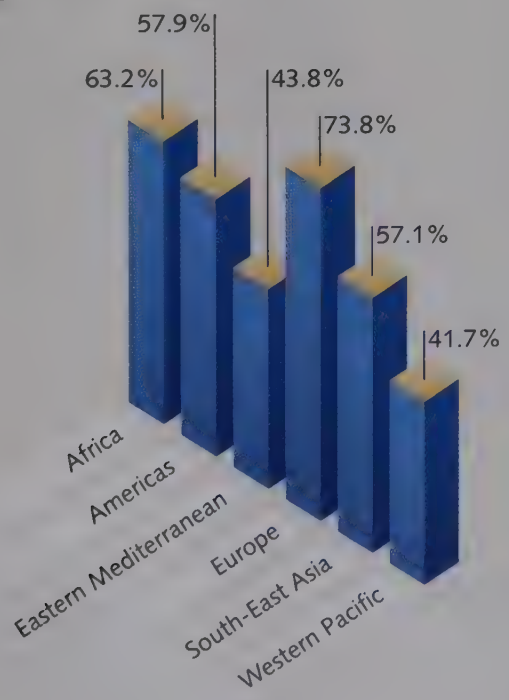
4.1 **Presence of substance abuse policy in each WHO Region and the world**
N=183



4.2 **Year of initial formulation of the substance abuse policy**



4.3 **Countries in each WHO Region with formulation of the substance abuse policy after 1990**
(From all countries having a substance abuse policy)



Definitions

- *Therapeutic drug policy:* a written commitment, endorsed by the Minister of Health or the Cabinet to ensure accessibility and availability of essential therapeutic drugs. It contains measures for regulating the selection, purchase, procurement, distribution and use of essential and appropriate drugs, including those for mental and neurological disorders. It can also specify the number and types of drugs to be made available to health workers at each level of health service according to the functions of the workers and the conditions they are required to treat. Under the national policy, drugs may be supplied free of charge to all or selected groups.
- *Essential list of drugs:* the officially approved list of essential drugs that the country has adopted. It is usually adapted from the WHO Model List of Essential Drugs.

Salient Findings

- A therapeutic drug policy or an essential list of drugs is present in 88.4% of countries covering 90.8% of the world population. The European Region has the least number of countries with a policy or drug list (79.2%), whereas in the South-East Asia Region all countries have either a policy or a drugs list.
- Availability of psychotropic therapeutic drugs in primary care varies among countries. Phenobarbital is available in 96.6% of the countries, amitriptyline in 88.6% of the countries, chlorpromazine in 92.1%. Fluphenazine and lithium are unavailable at primary care level in more than 30% of the countries. Anti-parkinsonian drugs are unavailable at primary care level in about 40% of countries.
- Almost 20% of countries do not have at least one common anti-depressant (amitriptyline), one anti-psychotic (chlorpromazine) and one anti-epileptic (phenytoin) in primary care. This is even worse in the African Region where 29% of countries do not have all these three drugs.
- Where these medicines are available in primary care, pricing structure sometimes acts as a barrier to access in many countries.
- The median cost of treating a patient for depression (amitriptyline 150mg/day) and psychosis (chlorpromazine 400mg/day) for one year in low income countries is half and one-fourth, respectively of that in high income countries. This should be seen in the perspective of low income countries having GNP per capita one-twelfth that of high income countries.
- The median cost of treating a patient of epilepsy with 300mg of phenytoin per day for one year is low across all countries, but even then, in low income countries it is only half of that in high income countries.

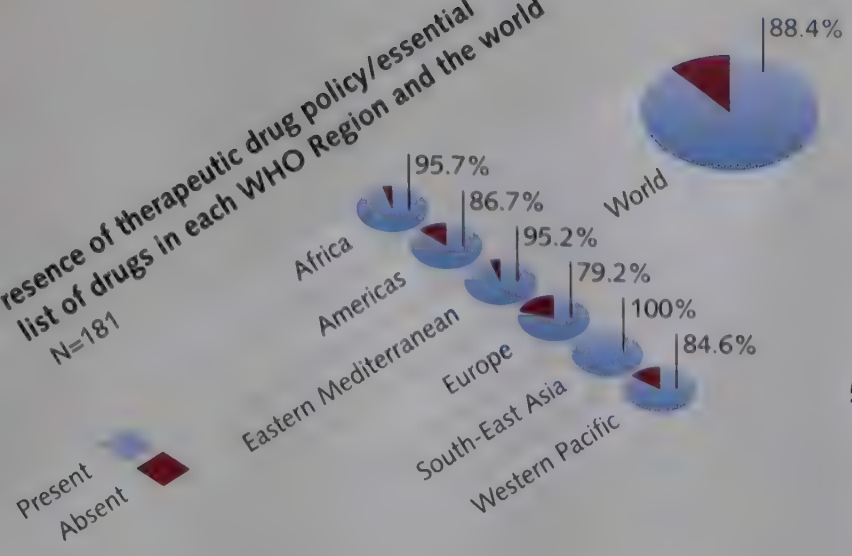
Limitations

- Information is unavailable on how many and which psychotropic therapeutic drugs are included in the essential lists of drugs.
- The availability of the drugs is not uniform across all primary care centres in a country.
- Data on cost of drugs are available only from few countries and this may not be representative of an entire WHO Region.
- Prices have been converted directly from local currencies to USD, without consideration of purchasing power.

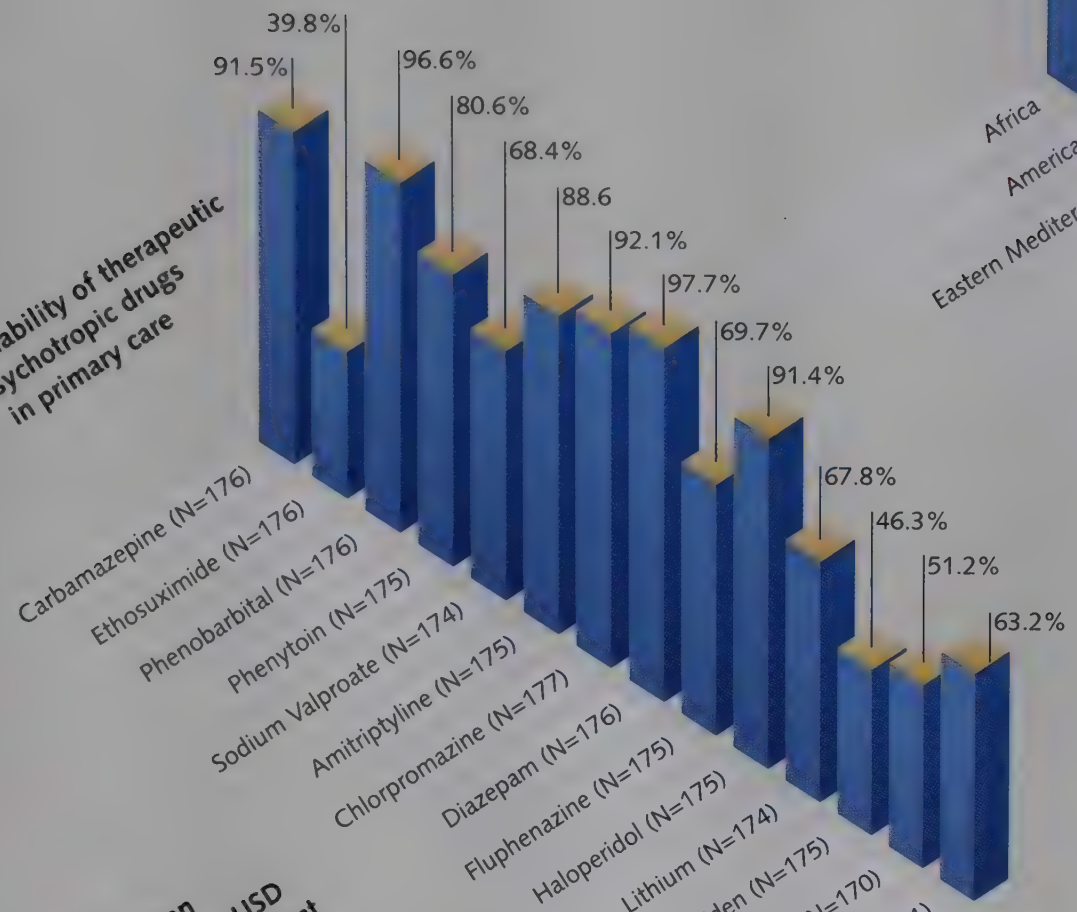
Implications

- The government has the responsibility of developing a national drug policy and list of essential drugs. Psychotropic drugs should be included and made available in primary care at low or no cost. These measures together with training to primary care professionals can significantly enhance provision of mental health care.
- Drugs whose patents have expired are often available at low prices. They can be provided relatively inexpensively either through primary or community care.

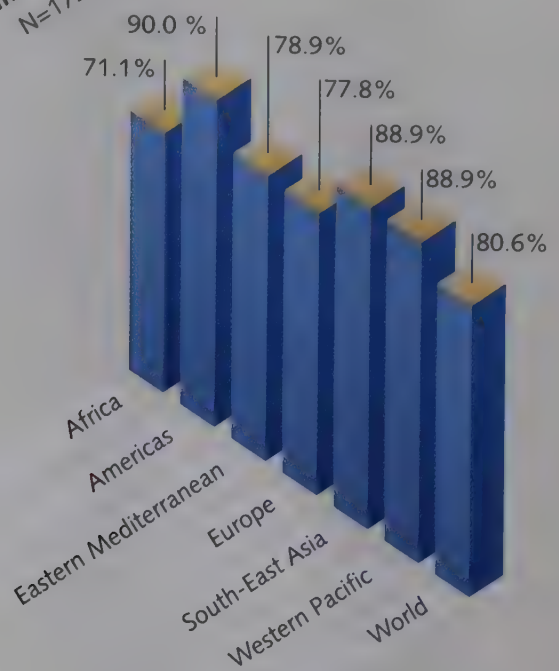
5.1 Presence of therapeutic drug policy/essential list of drugs in each WHO Region and the world
N=181



5.2 Availability of therapeutic psychotropic drugs in primary care

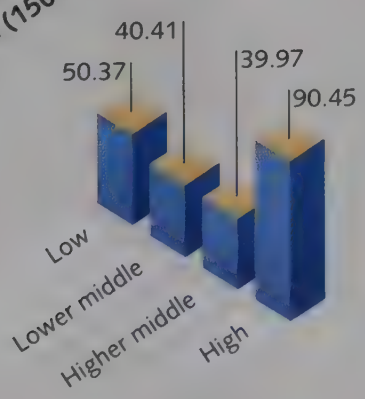


5.3 Availability of three* essential therapeutic psychotropic drugs at primary care level in each WHO Region and the world
N=175 *Phenytoin, amitriptyline and chlorpromazine

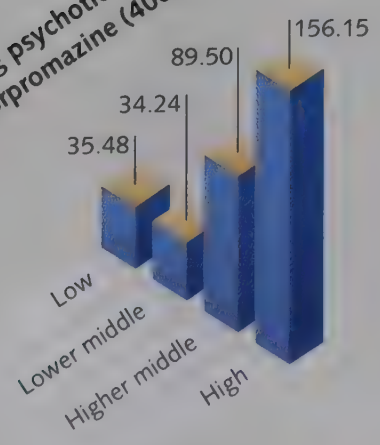


5.4 Comparison of median per year expenditure in USD of treatment within different income groups of countries[1]

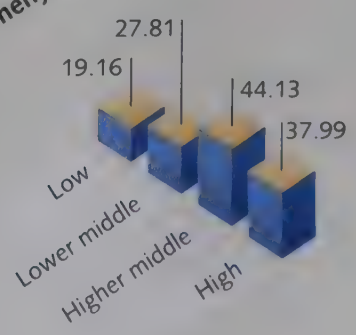
Treating depression with Amitriptyline (150mg/day)



Treating psychotic disorders with Chlorpromazine (400mg/day)



Treating epilepsy with Phenytoin (300mg/day)



[1] See page 41

Definitions

- *Specified budget for mental health:* the regular source of money, available in a country's budget, allocated for actions directed towards the achievement of mental health objectives.

Salient Findings

- 72% of the countries have a specified budget for mental health within the total health budget.
- 91 countries provided information on actual mental health expenditure out of the total health budget. Of these countries, 36.3% spent less than 1% of their health budget on mental health. More than two billion people live in these countries.
- There is a marked regional variation in mental health budgets. In the African Region 78.9% of countries spend less than 1% of their health budget on mental health. 62.5% of the countries in the South-East Asia Region spend less than 1% on mental health. On the other hand, in the European Region more than 54% of countries spend more than 5% of their health budget on mental health.
- Budgets for mental health also vary by the income group of countries. Of the low income countries, 61.5% spend less than 1% on mental health. Even of the high income countries about 16% spend less than 1% on mental health.

Limitations

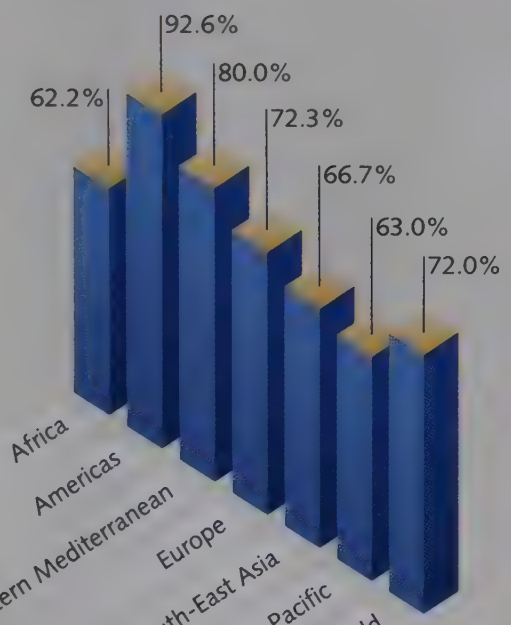
- Many countries, especially in the European Region, reported having no separate mental health budget. However, they make financial allocations for mental health within overall health budget at federal or state level.
- The number of countries reporting the amount of specified budget for mental health as a proportion of the total health budget is relatively small.
- Some countries have a federal system where states are responsible for health expenditure. These countries were not able to provide aggregate figures.

Implications

- A specified mental health budget is usually considered essential for the development of services especially in countries where these are at present grossly inadequate.
- In view of the large prevalence and burden of mental and neurological disorders and availability of effective interventions, the proportion of total health budget spent on mental health should be in the range of 5% to 15%. Most countries need to enhance their specified expenditure on mental health care substantially.

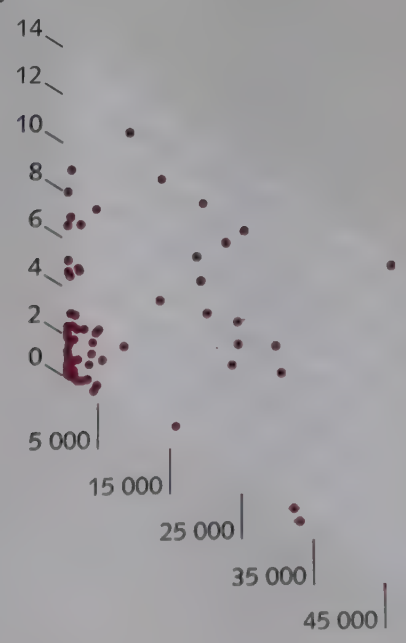
6.1 Specified budget for mental health as a proportion (%) of total health budget

6.2 Presence of specified budget for mental health care in each WHO Region and the world
N=175



6.3 Specified budget for mental health as a proportion of total health budget in each WHO Region
N=91

6.4 Specified budget for Mental Health as a proportion of total health budget by GNP/capita (USD)
N=70



Definitions

- *Out-of-pocket payment:* money spent by the consumer or the consumer's family as the need arises.
- *Tax based funding:* money for mental health services raised by taxation: either through general taxation, or through taxes that are earmarked specifically for mental health services.
- *Social insurance:* everyone above a certain level of income is required to pay a fixed percentage of their income to a government-administered health insurance fund. In return, the government pays for part or all of consumers' mental health services, should it be needed.
- *Private insurance:* the health care consumer voluntarily pays a premium to a private insurance company. In return, the insurance company pays for part or all of the consumer's mental health services, should it be needed.
- *External grants:* money provided to countries by other countries or international organizations.

Salient Findings

- Taxes are the primary method of mental health financing for 60.2% of the countries, followed by social insurance (18.7%), out of pocket payments (16.4%). Private insurance and external grants account for 1.8% and 2.9% respectively.
- Out-of-pocket payments are used as the primary method of financing mental health in 35.9% of countries in the African Region and 30% of countries in the South-East Asia Region. No countries in the European Region use this method as the primary means of expenditure for mental health.
- Social insurance is a primary method of financing in 50% of countries in the European region. Countries in the African, South-East Asia and the Western Pacific Regions do not use social insurance as the primary method of mental health financing.
- Private insurance is the primary method of financing in very few countries.
- External grants support mental health as a primary method of financing in 7.7% of countries in the Western Pacific Region, 5.6% of countries in the Eastern Mediterranean Region and 5.1% of countries in African Region.
- Tax is the most common primary method of financing in all the four income groups.
- Out-of-pocket expenditure is the primary method of financing in 39.6% of low income countries. It is the primary method of financing in almost none of the higher income countries.
- Social insurance is the primary method of financing in 38.3% of high income countries and in 29.4% of higher middle income countries. No low income country uses social insurance as a primary method of financing mental health.

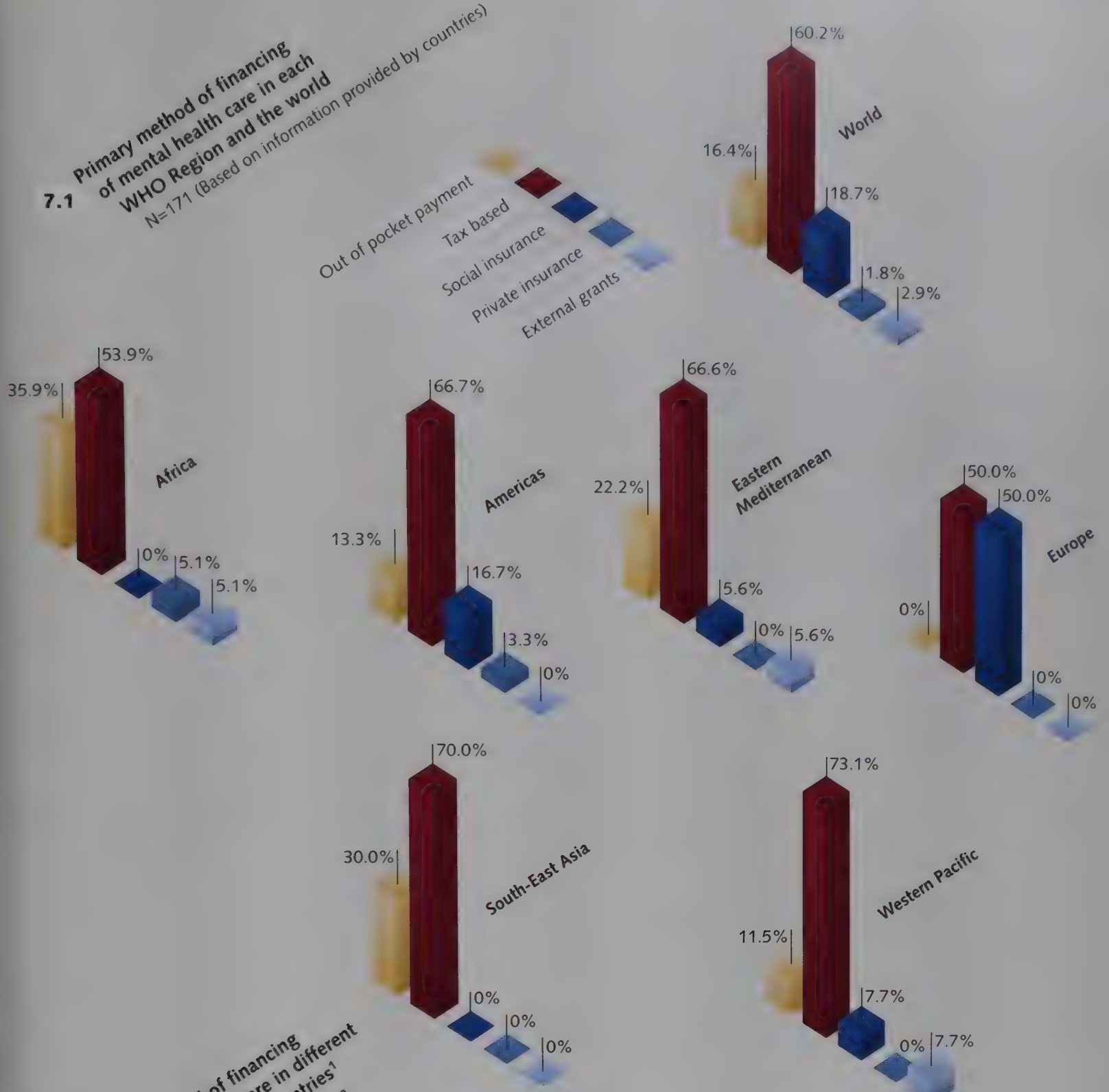
Limitations

- The information on methods of financing mental health should be considered preliminary and indicative, since it is derived only from governmental sources, pertains only to the "most important" method of financing and is not supported at present by actual numbers.
- Though operational definitions of the terms used were provided, it is possible that some countries may not have used them accurately while providing information.
- It should also be noted that the information is based only on government expenditure. It does not account for private or any other non-governmental expenditure on mental health.
- In some countries traditional healers are responsible for mental health community care in rural settings. It is difficult to assess modes of payment for their services.

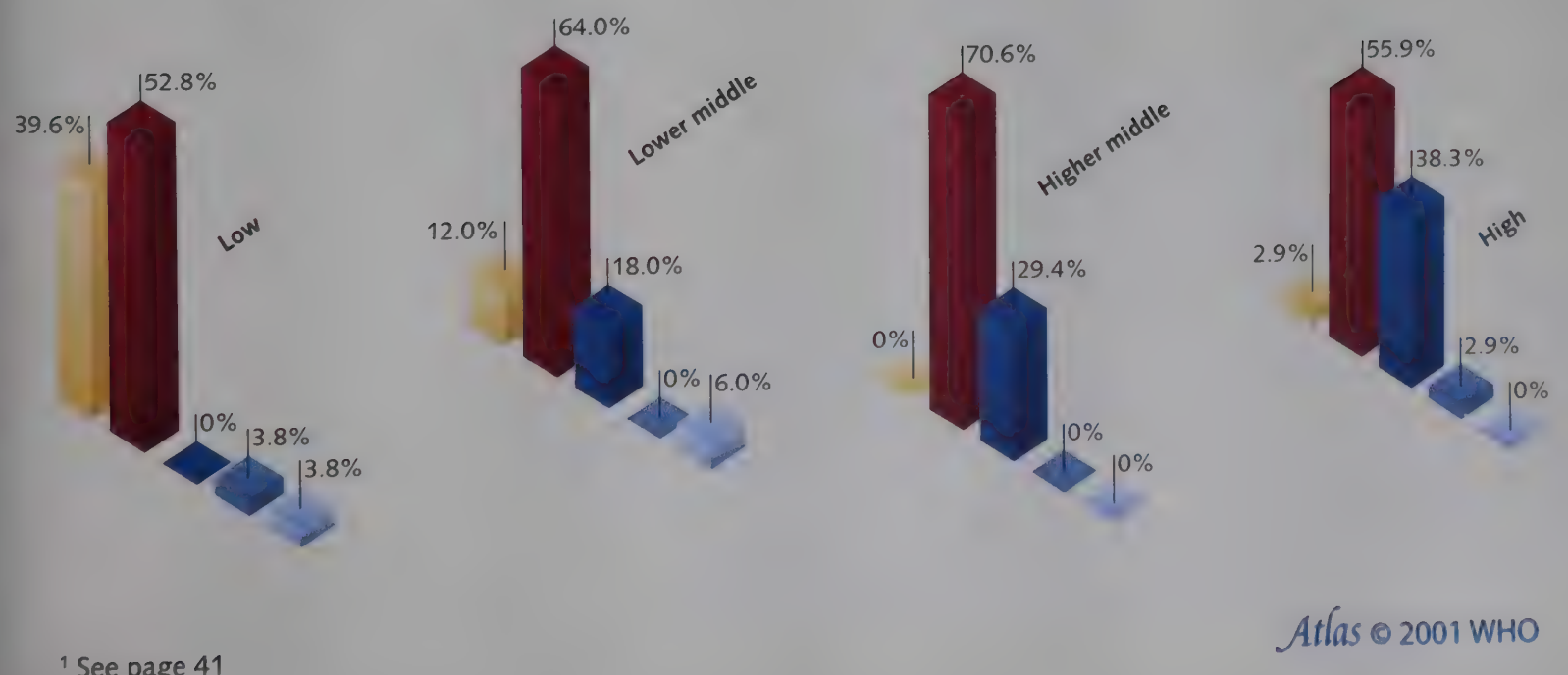
Implications

- More accurate information is needed on methods of financing mental health care.
- Insurance plays only a small role in financing mental health care in most countries.
- Out-of-pocket expenditure puts excessive unplanned burden on persons affected by mental disorders and their families. This should be avoided by shifting to tax-based or insurance as methods of financing.

7.1 Primary method of financing of mental health care in each WHO Region and the world
N=171 (Based on information provided by countries)



7.2 Primary method of financing of mental health care in different income groups of countries[1]
N=171 (Based on information provided by countries)



[1] See page 41

Definitions

- *Mental health in primary care:* the provision of basic preventive and curative mental health care at the first point of entry into the health care system. Usually this means that care is provided by a non-specialist who can refer complex cases to a more specialized mental health professional.
- *Training of primary care personnel:* the provision of essential knowledge and skills in identification, prevention and care of mental disorders to primary health care personnel.

Salient Findings

- 87% of countries covering 97% population report having mental health care as an identified activity at the primary health care level.
- Treatment facilities for severe mental disorders are however present in only 59% of countries accounting for 51% population.
- The availability of treatment facilities at primary care level for severe mental disorders varies from 44.4% of countries in the South-East Asia Region to more than 65% of countries in the Americas and the European Region.
- Regular training facilities for primary level mental health personnel are present in 59% of countries.

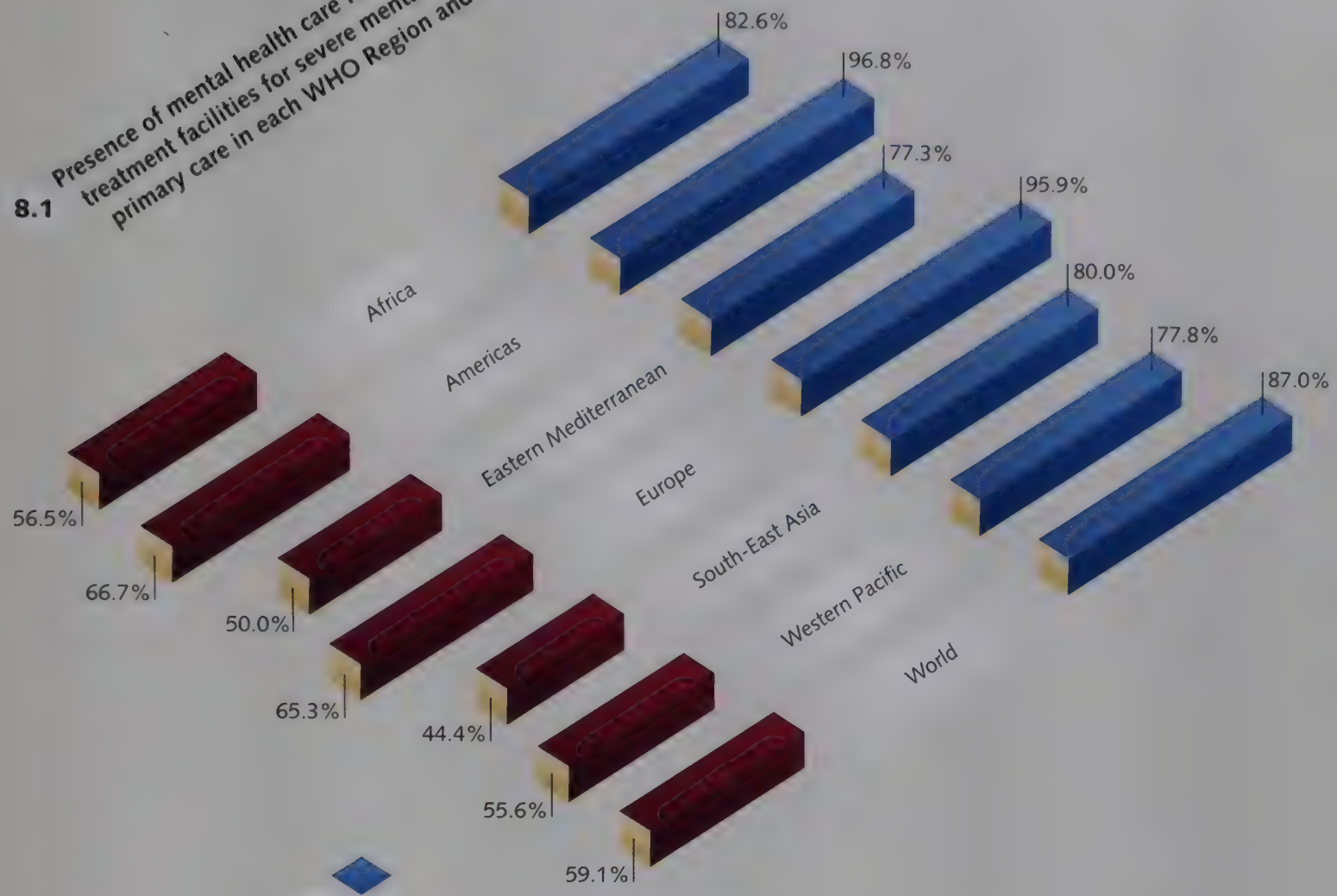
Limitations

- Though a large number of countries have reported mental health to be an identified activity at primary care level, the actual implementation of this at ground level is highly variable. Often the facilities are restricted to specific areas where specific projects are in place and do not extend to the whole country.
- Training also varies across countries while some have regular and more comprehensive programmes for different types of personnel, others do not. However, the data do not reflect this difference in quality and coverage of training activities.

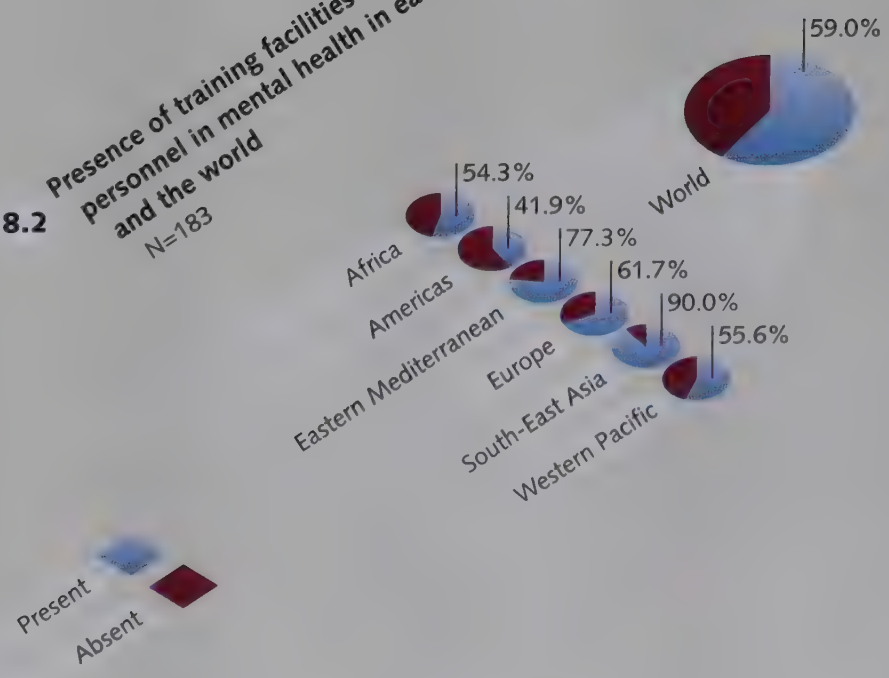
Implications

- Since a significant proportion of patients at the primary health care level have mental disorders, availability of mental health care in these settings is very important.
- Integration of mental health care into primary care is essential for extending services to underserved areas in both developing and developed countries.
- Though most countries have identified mental health care as being an activity at primary care level, efforts should now focus on making it available and extending its coverage to larger areas.
- Treatment facilities for mental disorders at primary health care level should be improved.
- When adequate training is provided, the identification and treatment rates of common mental disorders in primary health care can be increased substantially.

8.1 **Presence of mental health care facilities and treatment facilities for severe mental disorders in primary care in each WHO Region and the world**



8.2 **Presence of training facilities for primary care personnel in mental health in each WHO Region and the world**
N=183



Definitions

- *Psychiatric bed:* bed maintained for continuous use by patients with mental disorders for 24 hours. These beds are located in public and private psychiatric hospitals, general hospitals and hospitals for elderly and children.

Salient Findings

- The mean number of psychiatric beds in the world per 10000 population is 4.36 (Standard Deviation (S.D.) 5.47, Median 1.6)
- There are about 1.85 million psychiatric beds in the world, of which 65% are in mental hospitals.
- In more than 40% of the countries, covering about 65% of the world's population, individuals have access to less than one psychiatric bed per 10000 population.
- The mean number of psychiatric beds varies widely across regions. It is only 0.57 per 10000 population in the South-East Asia Region compared to 8.93 per 10000 in the European Region.
- The median figures per 10000 population for the Regions are even lower: 0.33 in the South-East Asia Region, 0.34 in the African Region, 0.79 in the Eastern Mediterranean Region, 0.98 in the Western Pacific Region, 3.3 in the Americas and 8.7 in the European Region.
- In the African Region there are about 41236 psychiatric beds for 626 million people. There are about 689642 psychiatric beds for 841 million people in the European Region.
- The mean and median number of psychiatric beds per 10000 population across different income group countries also vary. Whereas for the low income countries the mean and median are 1.03 and 0.24, respectively, the numbers for the high income countries are 9.48 and 8.7 respectively.
- The proportion of psychiatric beds in mental hospitals exceeds the proportion of beds in general hospitals by a wide margin in all the regions. The South-East Asia Region has 84% of psychiatric beds in mental hospitals compared to the Americas, which has 47.6% of beds in mental hospitals.

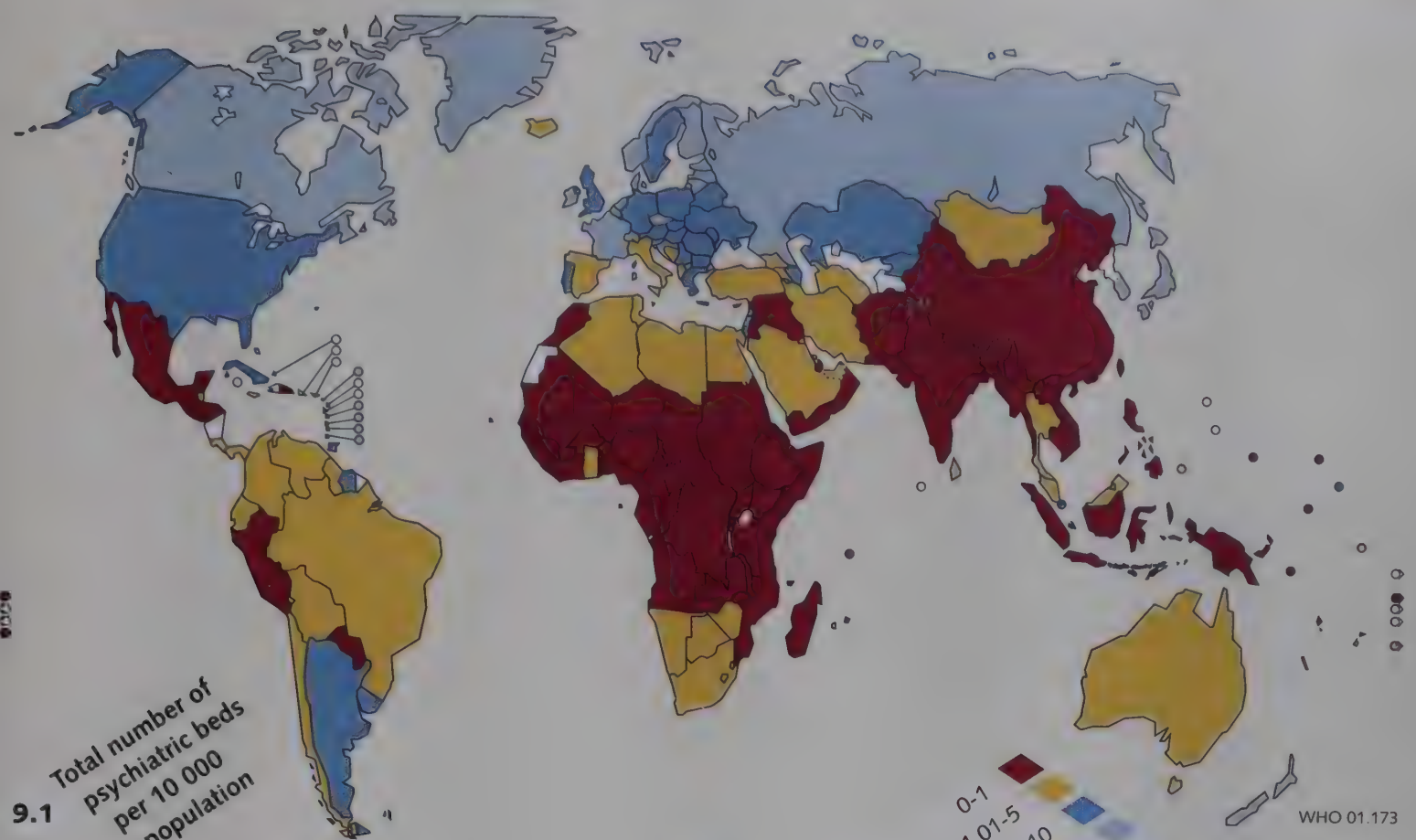
Limitations

- Some countries were unable to provide an estimate of the number of beds in private hospitals.
- The category of "other beds", include beds in private hospitals, military hospitals, hospitals for special population and long-term rehabilitation centres.
- No information was available on beds in chronic care versus acute care.

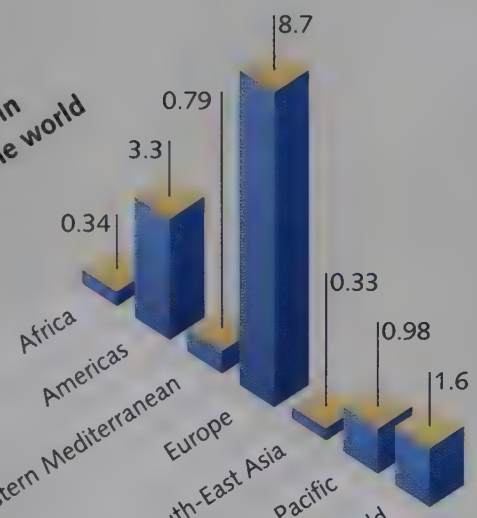
Implications

- Though mental hospitals with a large number of beds are not desirable, a minimum number of inpatient places are necessary for patients who cannot be treated while staying in the community.
- Overall, the number of psychiatric beds in developing countries is inadequate. The beds that are available, are most often in mental hospitals. Patients stay in highly unsatisfactory conditions.
- Inpatient places should be moved from mental hospitals to general hospitals and community rehabilitation services.
- Considering the paucity of beds in some countries, new inpatient services dedicated solely to management of mental disorders should be established in general hospitals. These new services along with the development of community services will help de-institutionalize mental health services.

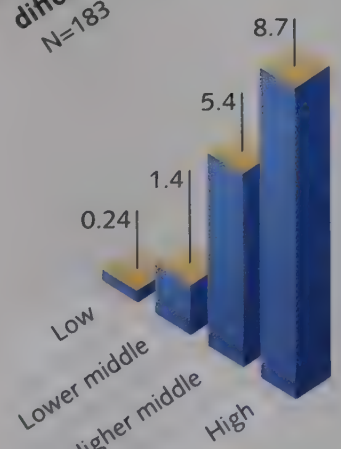
9.1 Total number of psychiatric beds per 10 000 population



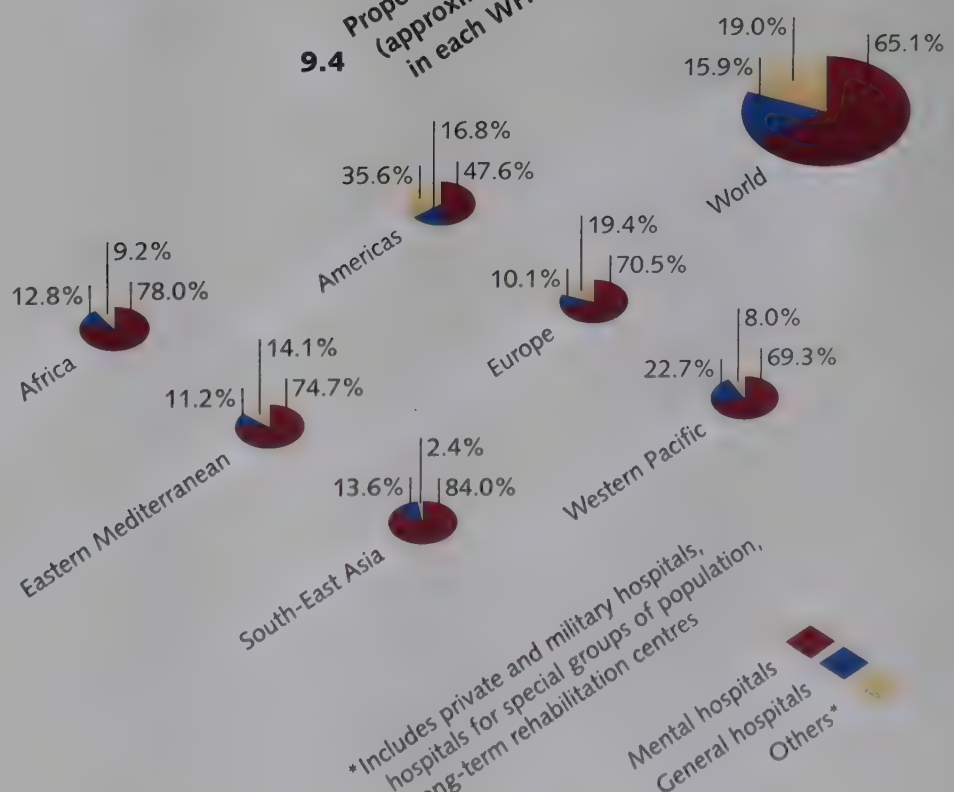
9.2 Median number of psychiatric beds per 10 000 population in each WHO Region and the world
N=183



9.3 Median number of psychiatric beds per 10 000 population in different income groups of countries[1]
N=183



9.4 Proportion of psychiatric beds (approximate) across different settings in each WHO Region and the world



[1] See page 41

Definitions

- *Psychiatrist:* a medical doctor who has had at least two years of post-graduate training in psychiatry at a recognized teaching institution. This period may include training in any sub-speciality of psychiatry.

Salient Findings

- The mean number of psychiatrists in the world per 100 000 population is 3.96 (S.D. 5.94, Median 1.0).
- 52.7% of countries covering 69.2% of the world's population have access to less than one psychiatrist per 100 000 population.
- All countries in the South-East Asia Region and almost 96% of countries in the African Region accounting for 89% of the population have less than one psychiatrist per 100 000 population.
- The distribution of psychiatrists across regions is irregular. The median number of psychiatrists per 100 000 population varies from 0.05 in the African to 9.0 in the European Region. There are 1195 psychiatrists in the African Region for 626 million people compared to 77 242 psychiatrists for 841 million people in the European Region.
- The median distribution per 100 000 population is 0.06 in the low income countries and 9.0 in the high income countries.
- Even among high income countries about 26% have less than 5 psychiatrists per 100 000 population.

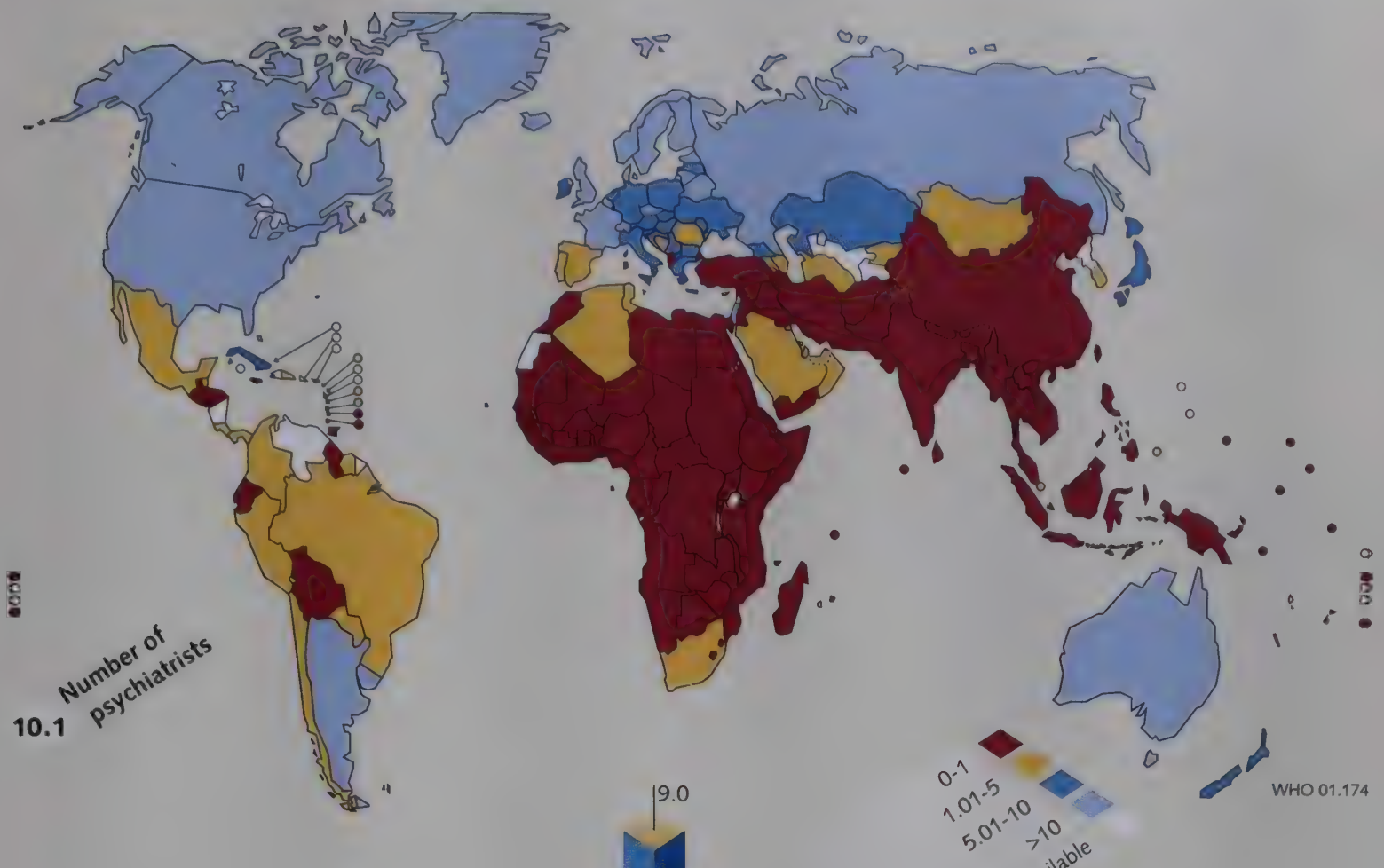
Limitations

- Some countries were unable to provide an accurate number of psychiatrists working in the private sector.
- Since the source of information in some countries was the national association for psychiatrists, it is possible that the psychiatrists who are not members of these associations have not been counted.
- The distribution of psychiatrists within countries is also very uneven with majority concentrated in urban areas. This distribution creates even more disparity in their availability than is apparent from the average figures.

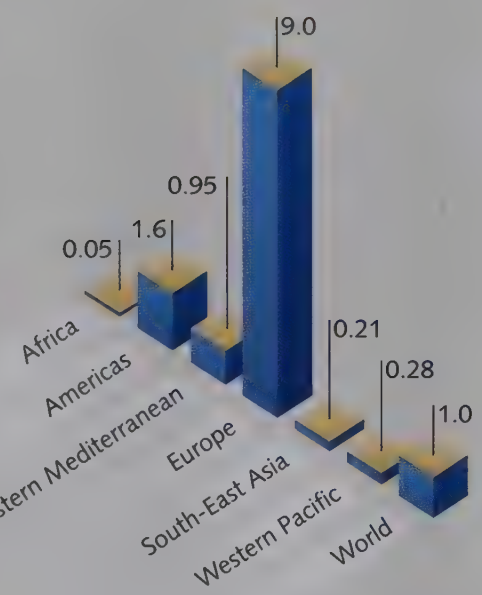
Implications

- A psychiatrist is an essential member, often the leader, of the mental health care team. Mental health care suffers in the absence of an adequate number of psychiatrists.
- Psychiatrists are also essential for training and providing support and supervision to primary health providers in mental health care.
- Overall, the number of psychiatrists is grossly deficient, especially in the developing and low income countries. The lack of psychiatrists in many countries is a result of not only a lack of training facilities but also of the low priority and preference given to this medical specialization.
- Systematic efforts to train psychiatrists and to retain them within countries are needed for a large number of developing countries.

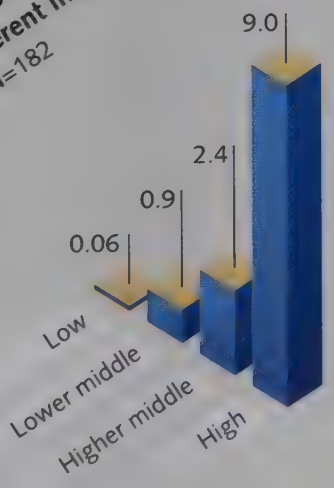
10.1 Number of psychiatrists



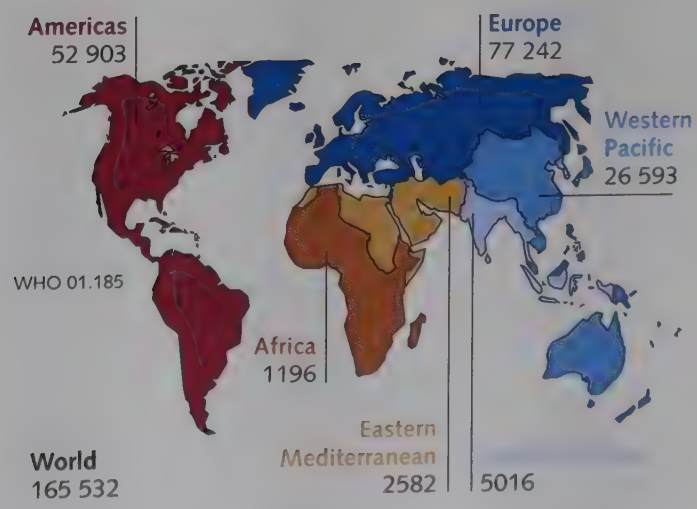
10.2 Median number of psychiatrists per 100 000 population in each WHO Region and the world
N=182



10.3 Median number of psychiatrists per 100 000 population in different income groups of countries[1]
N=182



10.4 Number of psychiatrists in each WHO Region
(Approximations based on information from 182 countries)



[1] See page 41

Definitions

- *Psychiatric Nurse:* a graduate from a recognized, university level nursing school with specialization in mental health. Psychiatric nurses are registered at the local nursing board (or equivalent) and work in a mental health care setting.

Salient Findings

- The mean number of psychiatric nurses per 100 000 population is 12.63 (S.D. 26.58, Median 2.0).
- About 45.7% of the countries constituting about 43.8% of the world's population, have access to less than one psychiatric nurse per 100 000 population.
- In the South-East Asia Region almost 95% of the population have access to less than one psychiatric nurse per 100 000 population. In the Eastern Mediterranean Region more than 73% people have access to less than one psychiatric nurse per 100 000 population.
- The median number of psychiatric nurses in the South-East Asia Region of the WHO is 0.16 per 100 000 population, whereas, in the European Region it is 27.5 per 100 000 population. The distribution of psychiatric nurses across regions is not even. There are about 7955 psychiatric nurses for 485 million people in the Eastern Mediterranean Region compared to 285 604 psychiatric nurses for 841 million people in the European Region.
- The median varies from 0.16 per 100 000 population among the low income countries to 33.5 per 100 000 population among the high income countries.
- Though more than 93% of the low income countries have less than 10 psychiatric nurses for every 100 000 population, even in high income countries about a third of them have less than 10 psychiatric nurses for 100 000 population.
- Whereas, there are 3 psychiatric nurses for every psychiatrist in the Americas and the European Region, there are 8 psychiatric nurses for each psychiatrist in the African and South-East Asia Regions.

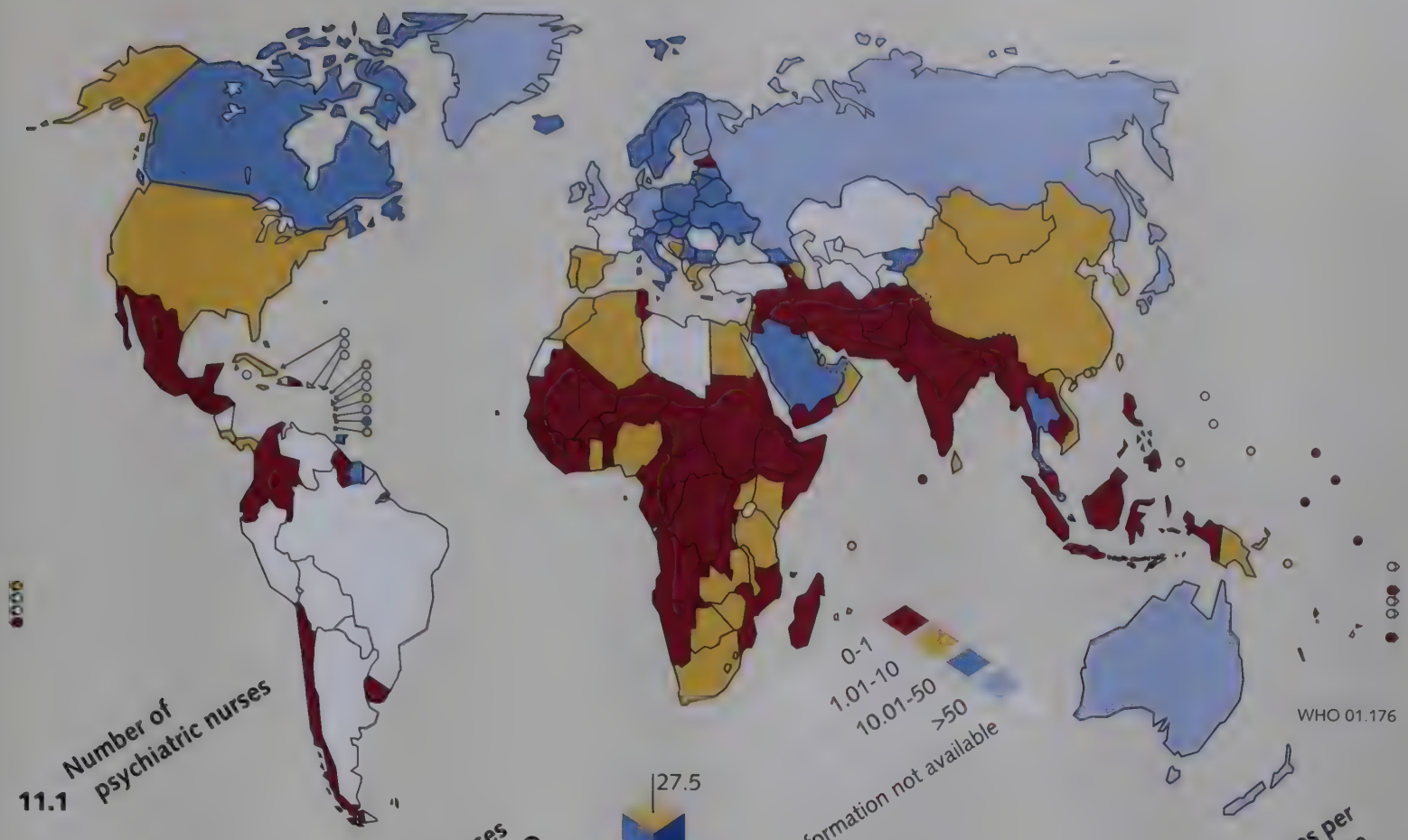
Limitations

- The total number of psychiatric nurses in some countries may actually be less as some countries may have reported general nurses who work in psychiatric facilities as psychiatric nurses, even though they may not have psychiatric nursing training.
- Some countries were unable to provide data on psychiatric nurses as they do not have any separate register for different kinds of nurses.

Implications

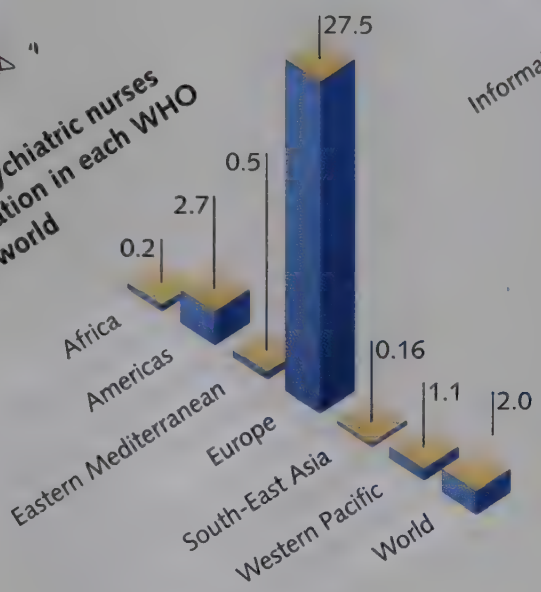
- Psychiatric nurses are important members of mental health care teams. They are also essential for community care services. With a growing emphasis on community-based care in mental health care, there will be a need for more psychiatric nurses.
- Overall, the number of psychiatric nurses in most developing and low income countries is extremely inadequate.
- While training facilities for psychiatrists have been developed, many countries have neglected creating training facilities for psychiatric nurses. This lack of facilities will be a limiting factor for establishing comprehensive mental health care teams.

11.1 Number of psychiatric nurses



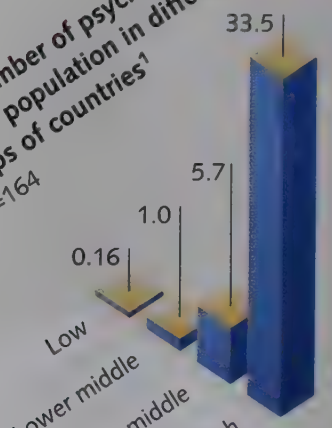
11.2 Median number of psychiatric nurses per 100 000 population in each WHO Region and the world

N=164



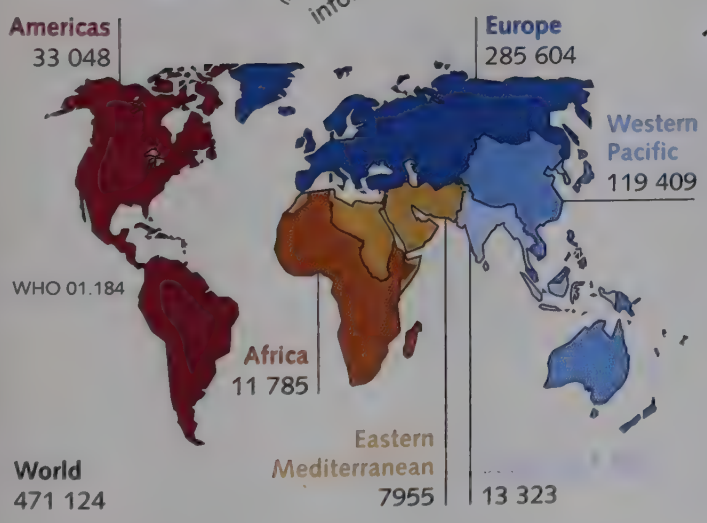
11.3 Median number of psychiatric nurses per 100 000 population in different income groups of countries[1]

N=164

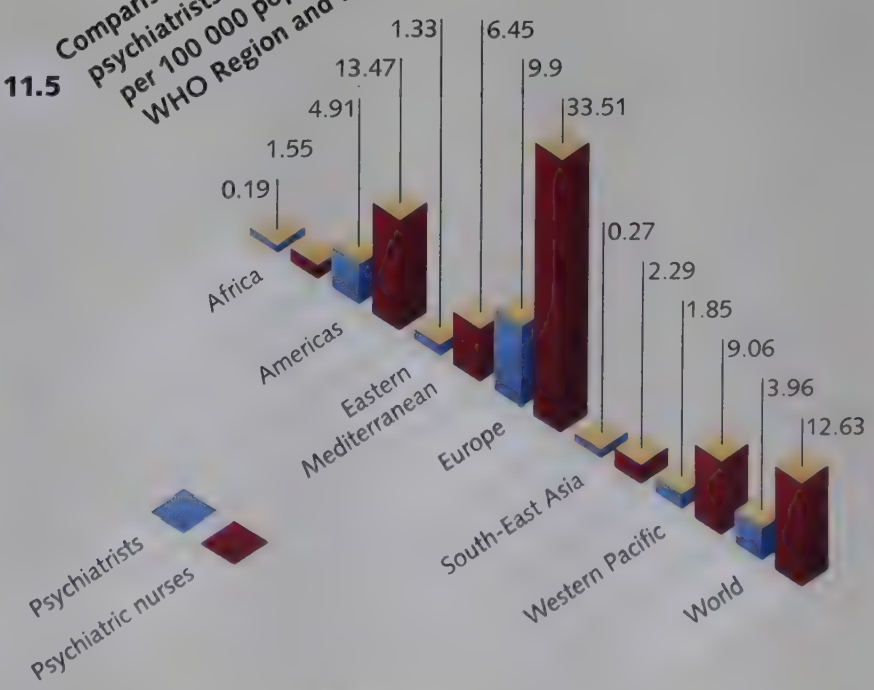


11.4 Number of psychiatric nurses in each WHO Region

(Approximations based on information from 164 countries)



11.5 Comparison of mean number of psychiatrists to psychiatric nurses per 100 000 population in each WHO Region and the world



[1] See page 41

Definitions

- *Neurologist:* a medical doctor who has at least two years of post-graduate training in neurology at a recognized teaching institution.
- *Neurosurgeon:* a medical doctor who has at least two years of post-graduate training in neurosurgery at a recognized teaching institution.

Salient Findings

- The mean number of neurologists per 100 000 population is 1.99 (S.D. 3.6, Median 0.2)
- The mean number of neurosurgeons per 100 000 population is 0.48 (S.D. 0.7, Median 0.12)
- 69% of countries encompassing a population of almost 72% have less than one neurologist per 100 000 population.
- Almost 88% of countries have less than one neurosurgeon per 100 000 population.
- The distribution of neurologists and neurosurgeons across regions is variable. The number of neurologists and neurosurgeons in the Western Pacific Region is very low. Median number for neurologists and neurosurgeons are both 0, but the mean numbers are 0.67 and 0.42, respectively. The median figures are also low in the African Region: 0.02 neurologists and 0.01 neurosurgeons per 100 000 population. In the South-East Asia Region the medians for both groups of professionals per 100 000 population is 0.02. The median distribution per 100 000 population in the European Region is 4.25 and 1.0 for neurologists and neurosurgeons, respectively.
- The low income countries have a median distribution of 0.03 for neurologists and 0.01 for neurosurgeons per 100 000 population.
- The median distribution per 100 000 population in high income countries is also low and is 3.0 neurologists per 100 000 population and 1.0 neurosurgeon per 100 000 population.

Limitations

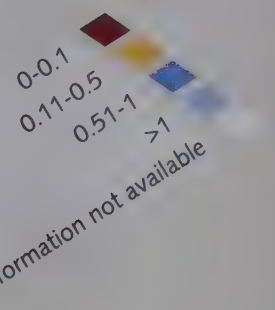
- Information on neurologists and neurosurgeons in the private sector may not have been reported accurately by some countries.
- Some countries reported information on neurologists and neurosurgeons based on membership figures from professional associations, leaving out some neurologists and neurosurgeons who are not members of those associations.

Implications

- Neurologists and neurosurgeons often complement the efforts of mental health professionals in providing care for mental disorders. Some disorders are at the boundary of psychiatry and neurology, while others require expertise of both. Neurologists and neurosurgeons are also required for management of neuropsychiatric disorders like epilepsy, Parkinson's Disease, Alzheimer's Disease, movement disorders, etc.
- The number of neurologists and neurosurgeons is extremely inadequate in most countries.
- Due to the inadequate number of neurologists in some countries, psychiatrists have to manage neurological disorders.
- In areas where there are no mental health professionals, neurologists or neurosurgeons (if available) provide the needed mental health care.

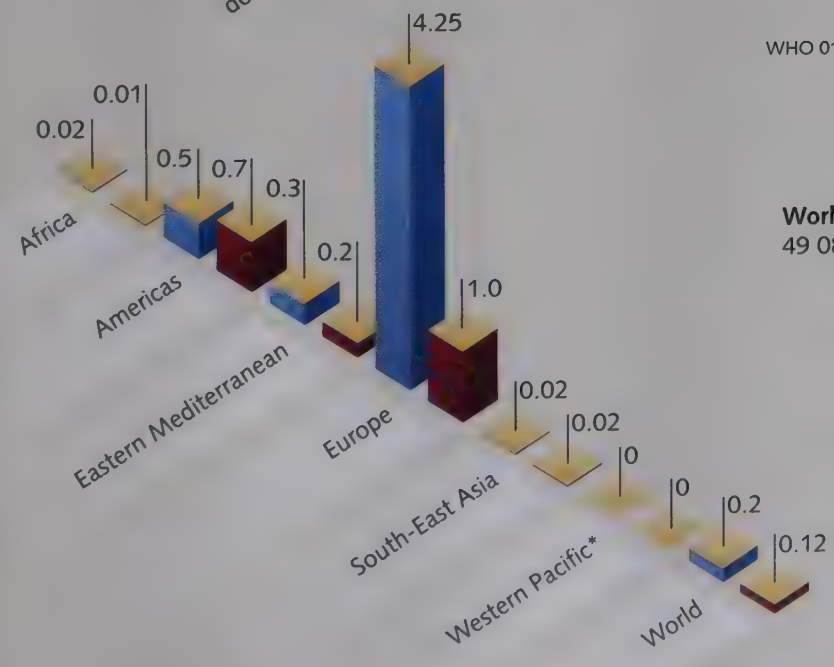
12.1 Number of neurologists

12.2 Number of neurosurgeons



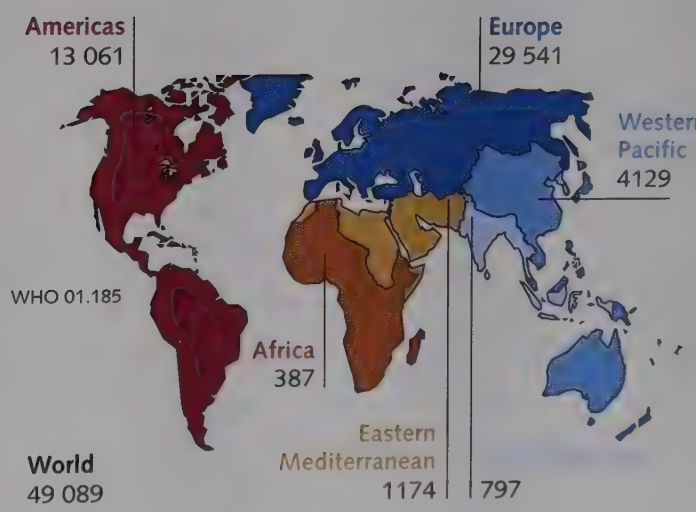
12.3 Median number of neurologists and neurosurgeons per 100,000 population in each WHO Region and the world

*The median numbers for Western Pacific Region is 0 as many smaller countries do not have these professionals



12.4 Number of neurologists in each WHO Region

(Approximations based on information from 152 countries)



Definitions

- *Psychologist working in mental health:* a graduate from a recognized, university-level school of psychology with specialization in clinical psychology. These psychologists are registered at the local board of psychologists (or equivalent) and work in a mental health setting.

Salient Findings

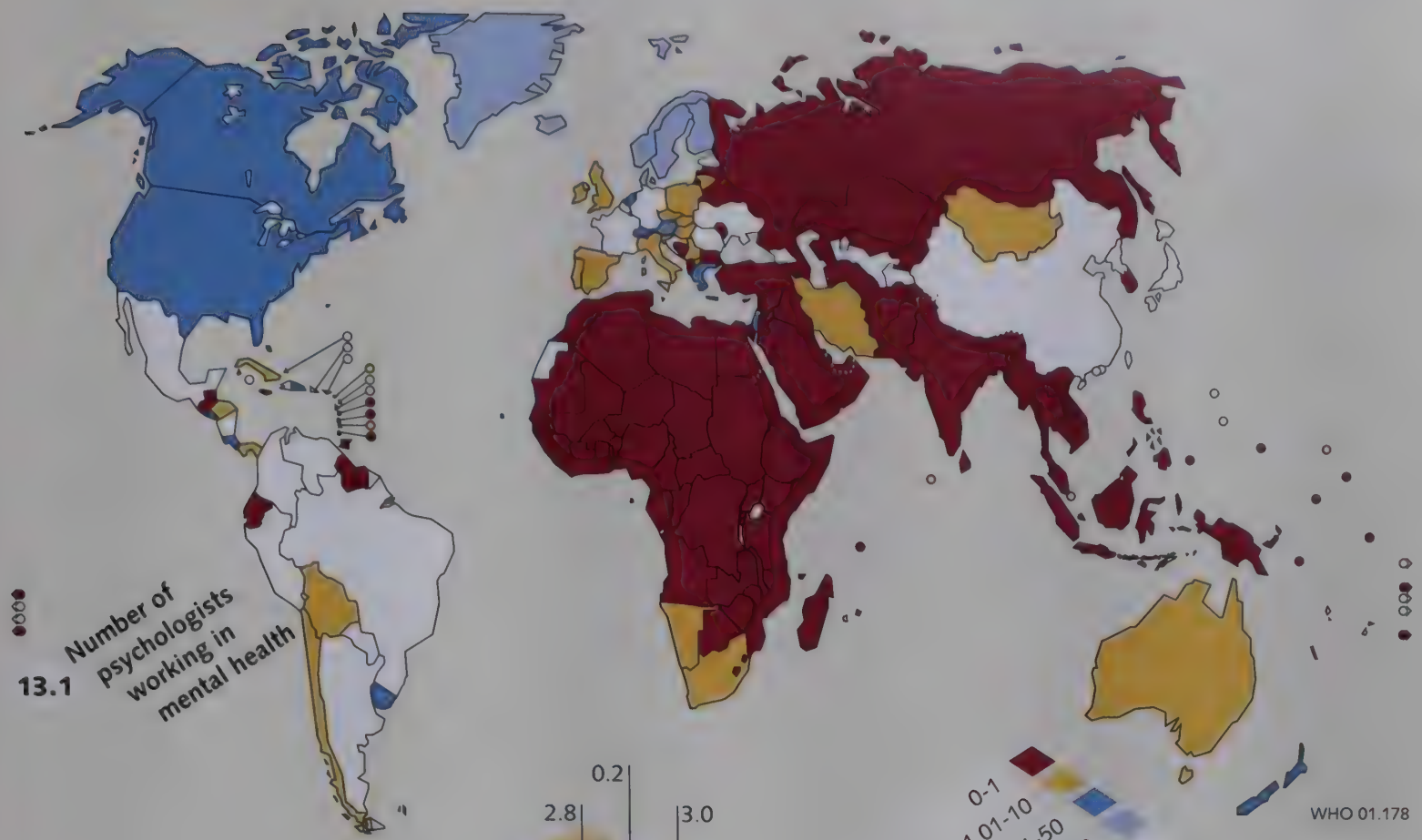
- The mean number of psychologists working in mental health per 100 000 population is 6.43 (S.D. 16.29, Median 0.4)
- More than 68% of countries accounting for more than 78% of the world's population have access to less than one psychologist per 100 000 population.
- The African and South-East Asia Regions have less than one psychologist per 100 000 population for more than 90% of the population. Even in the European Region, almost half the population have less than one psychologist per 100 000 population.
- The median distribution per 100 000 population varies from 0.02 in the South-East Asia Region to 3.0 in the European Region and 2.8 in the Americas.
- The median figures in low income countries are 0.04 per 100 000 compared to 26.7 per 100 000 in high income countries.

Limitations

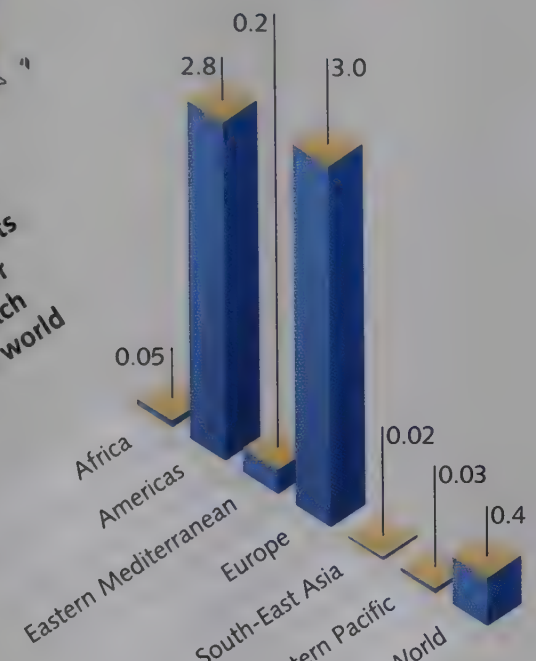
- Though the definition of "psychologist" was provided to countries, some countries may have used a wider definition including all psychologists in the country and not only those working in mental health settings.
- Information from some countries could not be analysed as they were unable to provide the specific number of psychologists working in mental health out of the total number of psychologists in the country.
- No information is available on how many psychologists are working in psychodiagnostics and how many in therapeutics or rehabilitation settings.

Implications

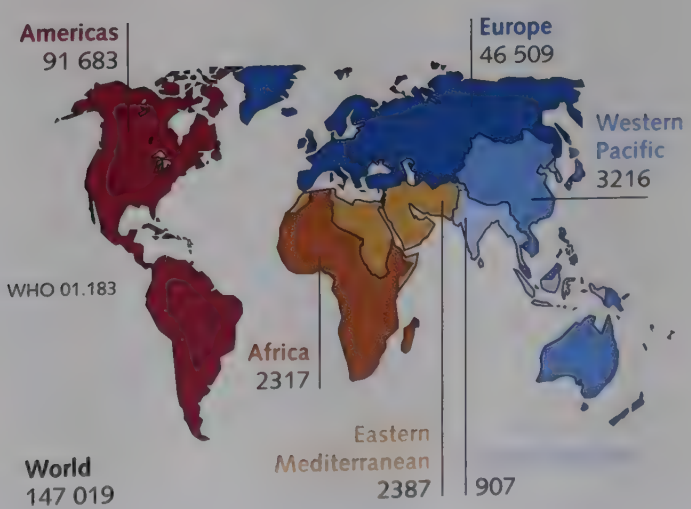
- Clinical psychologists or psychologists working in the field of mental health are important members of mental health care teams. They have several roles including diagnostics, therapy and rehabilitation.
- In-spite of the limitations of the data, it is clear that the number of psychologists working in the mental health sector is inadequate.
- Many countries train a large number of psychologists, but most of them do not work in the area of mental health care. This unsatisfactory situation needs to be improved.



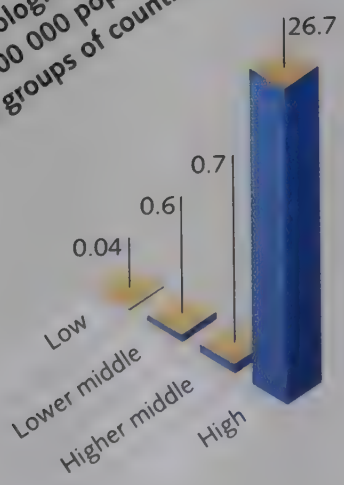
13.1 Number of psychologists working in mental health



13.2 Median number of psychologists working in mental health per 100 000 population in each WHO Region and the world
N=164



13.4 Number of psychologists working in mental health in each WHO Region
(Approximations based on information from 164 countries)



13.3 Median number of psychologists working in mental health per 100 000 population in different income groups of countries[1]
N=164

[1] See page 41

Definitions

- *Social workers working in mental health:* a graduate from a recognized, university-level school of social work, registered at the local board of social workers (or equivalent) and working in a mental health setting.

Salient Findings

- The mean number of social workers in the mental health sector per 100000 population is 8.64 (S.D. 25.37, Median 0.3)
- In the world, almost 64% of the countries accounting for 72% of the world's population have access to less than one social worker working in the mental health sector per 100000 population.
- More than 90% of the population in the African Region and the Eastern Mediterranean Region have access to less than one social worker working in the field of mental health per 100000 population. In the European Region there is only one social worker working in the field of mental health per 100000 people for more than 63% of the population.
- The median number of social workers vary from 0.04 per 100000 population in the African Region to 2.35 per 100000 population in the European Region.
- Low income countries have a median distribution of 0.03 per 100000 population, whereas high income countries have 25.5 per 100000 population.

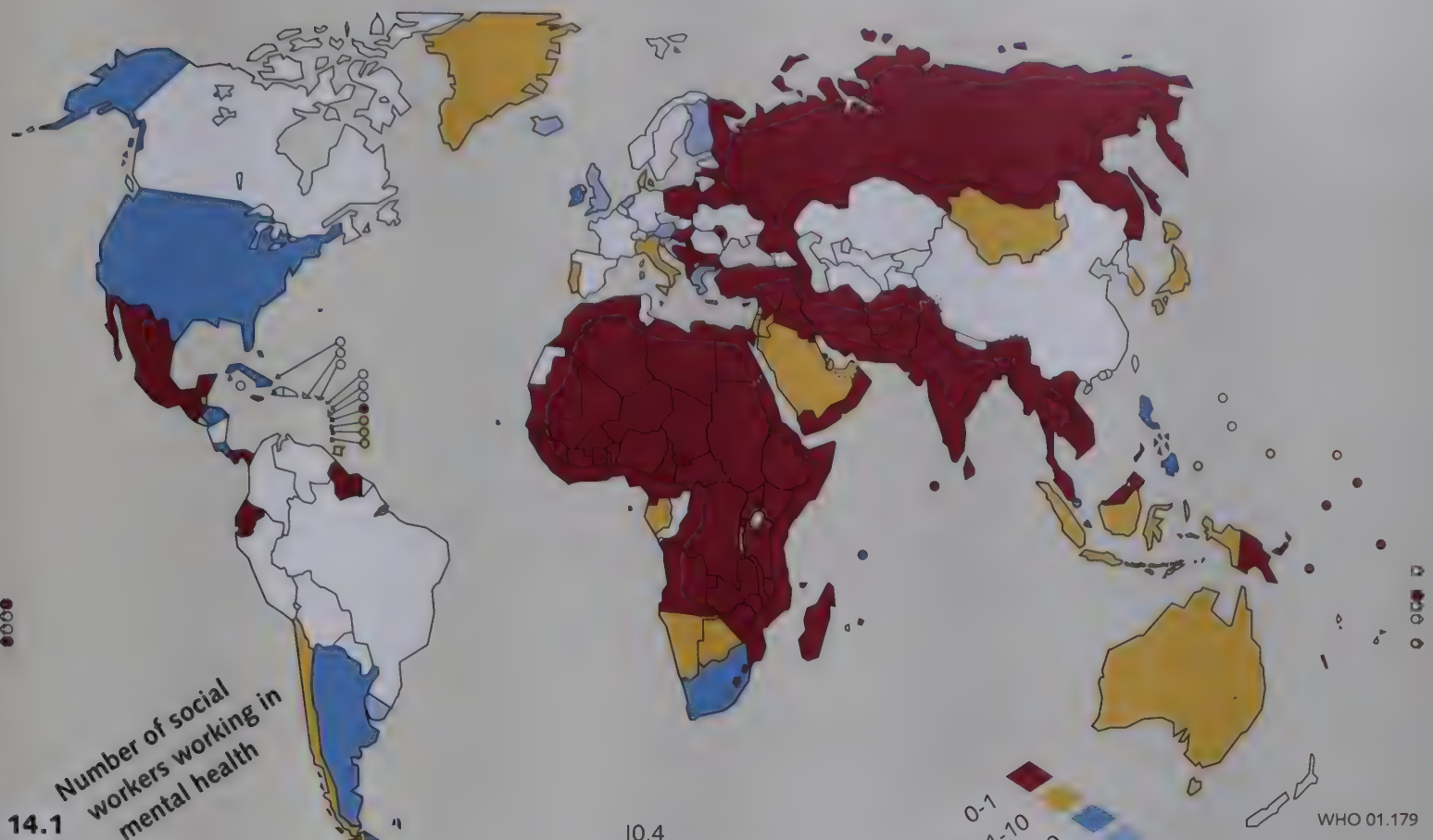
Limitations

- Some countries may have reported social workers working in any health department though the glossary definition specified that they should be working in a mental health setting. This may have led to over-reporting of social workers working in mental health sector.
- Information from some countries could not be analysed as they were unable to provide the specific number of social workers working in mental health out of the total number of social workers in the country.
- No information is available on the number of social workers working in the various mental health settings, e.g., inpatient, outpatient and community services.

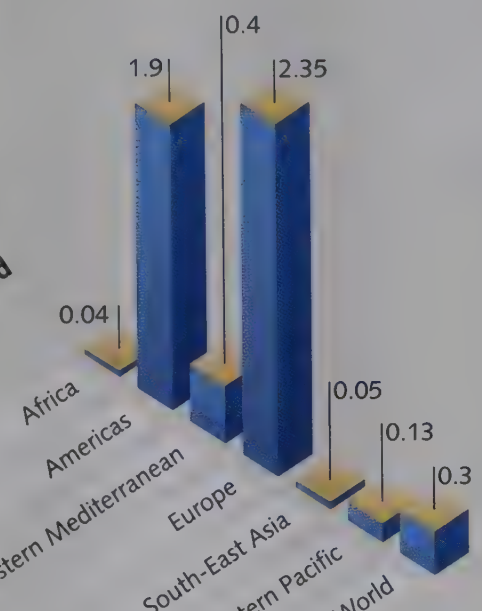
Implications

- Social workers play an important role in mental health care and more social workers are needed in order to provide community care.
- Though the data reported has some limitations, it is clear that the number of social workers in most regions of the world is low.
- Systematic efforts to train more social workers and to retain them in mental health setting is needed.

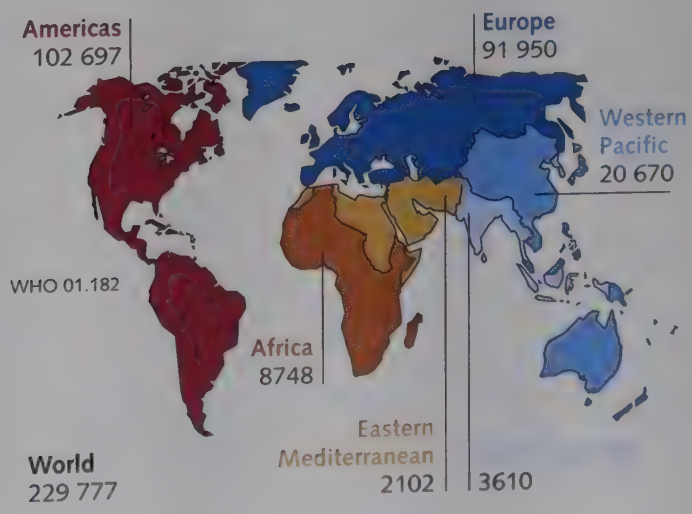
14.1 Number of social workers working in mental health



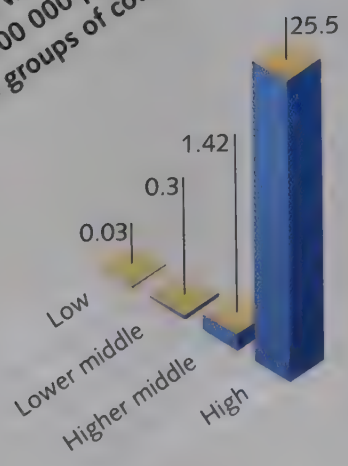
14.2 Median number of social workers working in mental health per 100 000 population in each WHO Region and the world
N=147



14.4 Number of social workres working in mental health in each WHO Region
(Approximations based on information from 147 countries)



14.3 Median number of social workers working in mental health per 100 000 population in different income groups of countries[1]
N=147



[1] See page 41

Definitions

- *Programmes for special populations:* programmes that address the mental health concerns, including the social integration, of the most vulnerable and disorder-prone groups of population such as refugees, people affected by natural and man-made disasters, indigenous people and minorities. Special population also include people who need special care such as the elderly and children.
- *Non-governmental organizations (NGOs):* voluntary organization, charitable group, service-user or advocacy groups or professional association.

Salient Findings

- Across the world the availability of mental health-related programmes for special populations is limited. Programmes for indigenous people exist in only 15.1% of countries, programmes for minority groups in 17.3%, programmes for refugees in 28.3%, programmes for disaster-affected populations in 37.2%, programmes for elderly persons in 47.8% and programmes for children in 59.9% of countries.
- Programmes for children are present in 37.8% of countries in the African Region when 44.1% of the Region's population is composed of children. In the European Region, programmes for children exist in 77.1% of the countries while children account for 19.7% of the total population.
- Programmes for elderly are present in only 17.8% of the countries in the African Region and 67.7% in the Americas. The elderly population accounts for 4.8% and 11% of the total population in Regions of Africa and the Americas, respectively. While almost one-fifth of the population of countries in the European Region are aged over 60 years, about 40% of countries do not have special programmes for elderly.
- 88% of countries have NGOs in the area of mental health.
- NGOs are active in treatment, rehabilitation, prevention, promotion and advocacy.

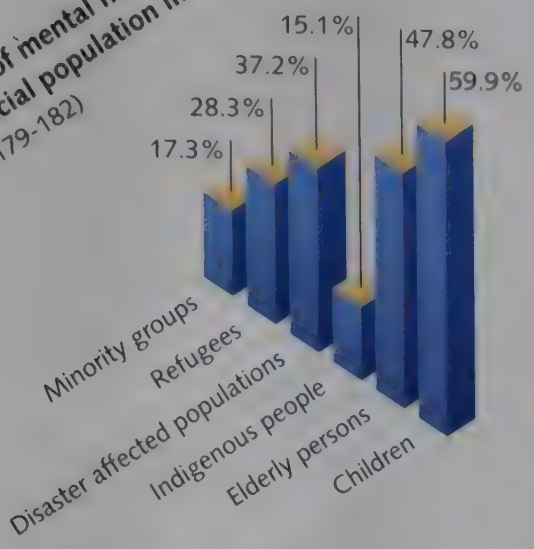
Limitations

- Though many countries reported having specific programmes, information on the type and quality of the programmes is not available.
- Some countries may not have specific programmes, but do have psychiatric facilities attending to special groups.
- Though many countries have reported NGO activities in mental health, it is not clear to what extent they cover the population.
- Information on the quality and coverage of services of the NGOs is lacking.
- Some of the NGOs mentioned are actually international NGOs working in countries and not necessarily local NGOs.

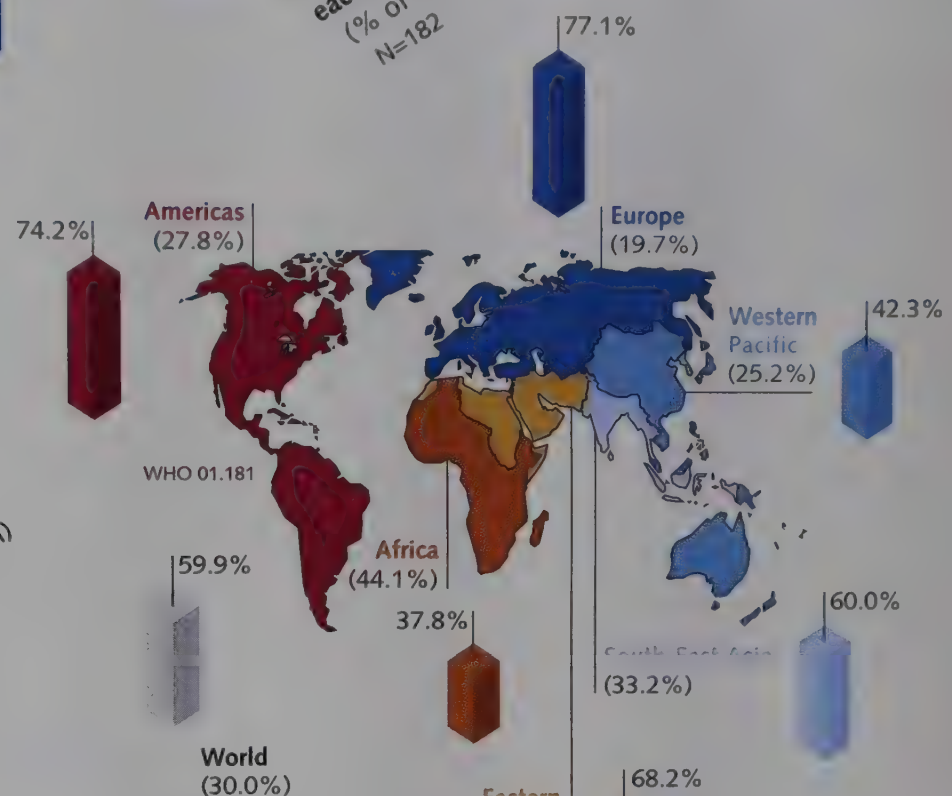
Implications

- Problems for children or elderly are often markedly different from those of the general adult population. Special programmes and services are needed for these groups as well as other vulnerable groups.
- NGOs play an important role in mental health care. Governments need to facilitate their activities.
- Presence of NGOs in a majority of countries is reassuring since it shows the active involvement of the community in the care of mental disorders, especially where the public sector response has been slow or inadequate to meet the demands.
- Establishment of consumer and self-help groups is a significant step in building local pressure for more appropriate care for mental disorders and developing community care programmes.
- NGOs should be helped by providing personnel, financing and training facilities, as they can respond to local needs and can initiate innovative care programmes.

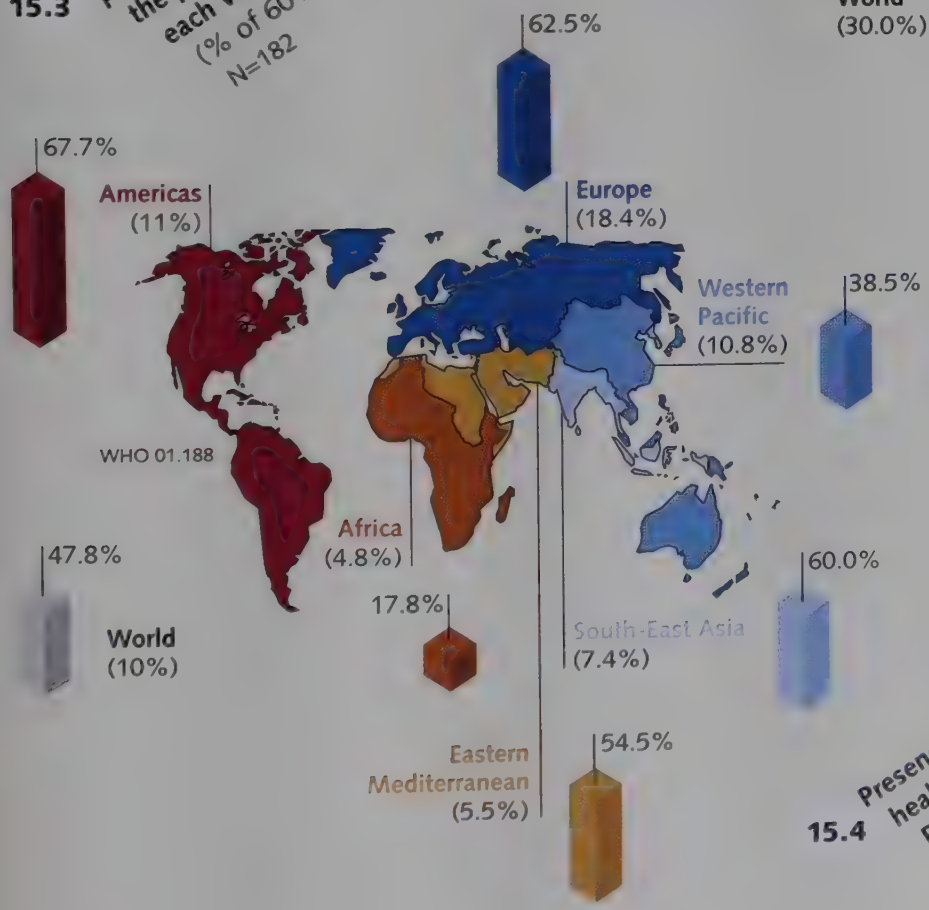
15.1 **Presence of mental health programmes for special population in the world**
N=(179-182)



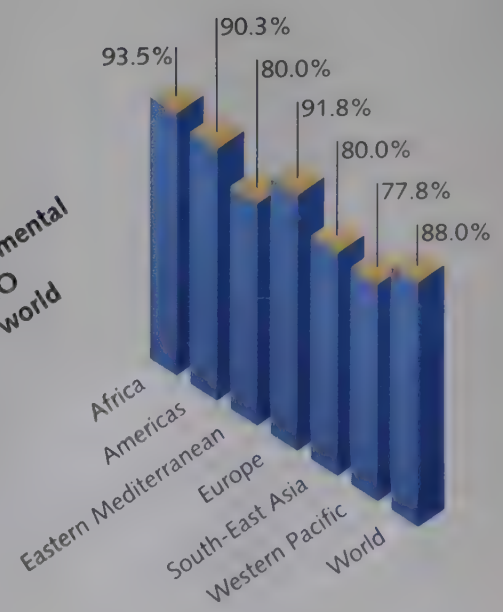
15.2 **Regional distribution of mental health programmes for children in comparison to the percentage of children population in each WHO Region**
(% of 0-14 years population in each region)
N=182



15.3 **Regional distribution of mental health programmes for ederly in comparison to the percentage of elderly population in each WHO Region**
(% of 60+ years population in each region)
N=182



15.4 **Presence of NGOs in mental health in each WHO Region and the world**
N=183



Definitions

- *Annual reporting system:* the preparation of information covering health and health services functions and use of allocated funds for each year by the government.
- *Information/data collection system:* an organized information gathering activity for service data. It usually incorporates admission or discharge rates, outpatient contacts, community contacts and patients subject to mental health legislation.
- *Epidemiological studies:* research studies focusing on extent and nature of mental disorders.

Salient Findings

- There is an annual mental health reporting system in 72.9% of countries and a data collection system or epidemiological studies in mental health in 56.5% of countries.
- Whereas about 90% of countries in the South-East Asia Region and the European Region report having some form of annual mental health reporting system, only 52.3% of countries in the African Region have such a system.
- Only 42.2% of countries in the African Region have a mental health data collection or epidemiological study carried out at a regional level.
- A data collection or epidemiological study on mental health is present in 58.1% of countries in the Region of the Americas and in 73.5% of countries in the European Region.
- An annual mental health reporting system exists in 60% of low income countries and 91% of high income countries.
- An epidemiological study or data collection system can be found in 43% of the low income countries and 77% of the high income countries.

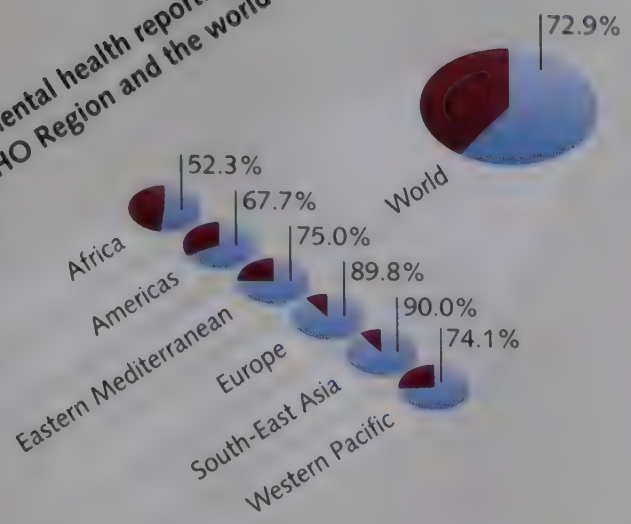
Limitations

- Information about the quality or extent of coverage of mental disorders in reporting systems is not available. Hence, it is not possible to judge whether a reporting system is adequate or needs improvement.
- Often the only information on mental health reported in the annual health bulletins of countries refers to the prevalence of "mental disorders" without clarifying the particular type of mental disorder nor the diagnostic system followed.
- Data collection varies enormously between different countries. Details on the methods and types of data collection is not available at present.
- Epidemiological studies also vary enormously in size and quality. More information on these is not available at present.

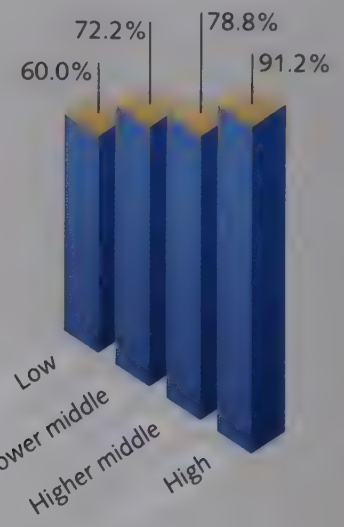
Implications

- A mental health reporting system helps in assessing the mental health situation of a country. Therefore without one in place, it is difficult to make a proper assessment of the mental health situation and make necessary improvements. It also provides a monitoring mechanism for trends.
- Mental health reporting systems should not only include information on disorders and service utilization, but should also include indicators for mental health of the general population.
- When reporting mental disorders, a common diagnostic system should be used and specific disorders should be named as otherwise the information cannot be compared with international prevalence figures.
- Well-conceived, nationally representative epidemiological studies are expensive; but they generate local data on disorders and needs. They also enhance the local awareness of high levels of prevalence and burden of mental disorders.

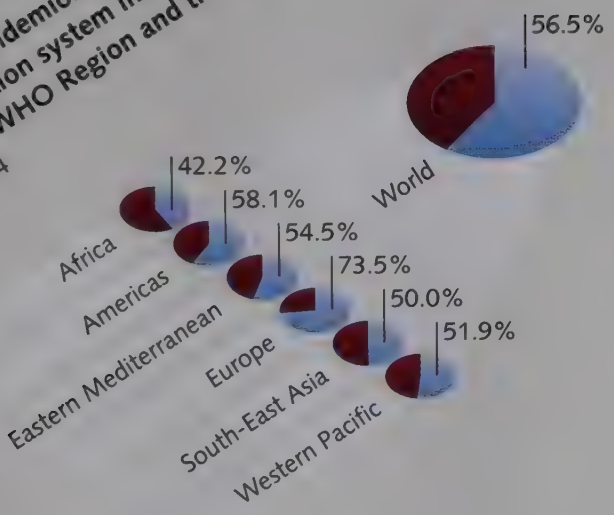
16.1 **Presence of mental health reporting system in each WHO Region and the world**
N=181



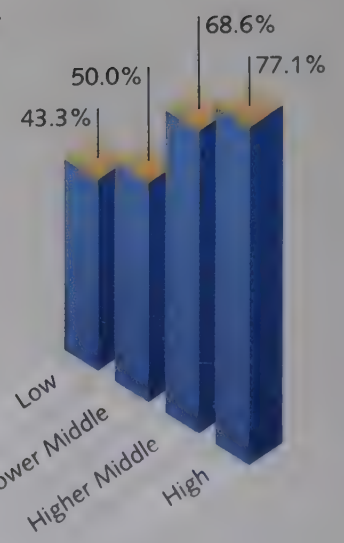
16.2 **Presence of mental health reporting system in different income groups of countries[1]**
N=181



16.3 **Presence of epidemiological study or data collection system in mental health in each WHO Region and the world**
N=184



16.4 **Presence of epidemiological study or data collection system in mental health in different income groups of countries[1]**
N=184



[1] Groups are based on GNP/capita of the countries:
Low (<$755)
Lower middle ($ 756-$2995)
Higher middle ($2996-$9265)
High (>$9266)
(World Bank 2000)

The following two annexes present summary tables of country specific data for selected variables.

African Region

	MH policy	National mental health programme	Community care in MH	Law in the field of MH	Disability benefits in MH	Substance abuse policy	Therapeutic drug policy/ Essential list of drugs	Specified budget for MH	Specified budget for MH as a proportion of total health budget[1]	Primary method of financing MH care[2]
Algeria	Y	N	N	Y	Y	Y	Y	N	NA	T
Angola	N	Y	N	NA	Y	Y	Y	N	NA	O
Benin	N	Y	N	NA	N	Y	Y	NA	NA	NA
Botswana	N	Y	Y	Y	N	N	Y	Y	1	T
Burkina faso	N	Y	N	Y	NA	N	Y	Y	NA	NA
Burundi	N	Y	Y	N	N	N	Y	N	NA	O
Cameroon	Y	Y	N	NA	Y	Y	Y	Y	1	T
Cape Verde	N	Y	N	Y	Y	Y	Y	Y	NA	T
Central African Republic	N	N	N	NA	N	Y	Y	N	NA	NA
Chad	N	Y	N	N	Y	Y	Y	Y	NA	O
Comoros	N	N	N	Y	N	N	Y	N	NA	O
Congo	Y	Y	N	N	N	Y	Y	N	NA	NA
Cote d'Ivoire	Y	Y	Y	NA	Y	Y	Y	Y	1	O
Democratic Republic of the Congo	Y	Y	N	Y	N	Y	Y	N	NA	O
Equatorial Guinea	Y	Y	N	N	Y	Y	Y	Y	NA	G
Eritrea	Y	N	Y	N	N	N	Y	N	NA	NA
Ethiopia	N	N	N	NA	Y	N	Y	Y	NA	T
Gabon	N	N	Y	N	N	N	Y	Y	1	T
Gambia	N	Y	Y	Y	Y	N	Y	N	NA	G
Ghana	Y	Y	Y	N	Y	Y	Y	Y	1	T
Guinea	Y	Y	N	Y	N	Y	Y	N	NA	O
Guinea-Bissau	N	Y	N	N	N	N	Y	Y	2	O
Kenya	N	Y	N	Y	N	N	Y	Y	1	T
Lesotho	N	Y	Y	Y	Y	N	Y	Y	2	T
Liberia	N	N	Y	Y	N	N	Y	N	NA	O
Madagascar	Y	Y	N	Y	Y	N	Y	Y	1	T
Malawi	Y	Y	Y	Y	N	N	Y	Y	2	T
Mali	Y	Y	Y	Y	NA	Y	Y	Y	1	O
Mauritania	N	Y	N	N	N	N	N	Y	1	O
Mauritius	Y	Y	Y	Y	Y	Y	Y	Y	1	T
Mozambique	N	Y	Y	NA	N	Y	Y	Y	NA	T
Namibia	N	N	Y	Y	Y	N	Y	N	NA	T
Niger	Y	Y	Y	Y	N	Y	Y	N	NA	T
Nigeria	Y	Y	Y	N	Y	Y	Y	Y	NA	O
Rwanda	Y	Y	Y	NA	N	Y	Y	Y	1	P
Sao Tome and Principe	N	Y	N	Y	Y	N	Y	Y	NA	NA
Senegal	Y	N	Y	Y	N	Y	Y	Y	NA	P
Seychelles	Y	Y	Y	Y	Y	Y	Y	Y	1	T
Sierra Leone	N	N	N	N	N	N	N	N	NA	O
South Africa	Y	Y	Y	Y	Y	N	Y	Y	2	T
Swaziland	N	N	Y	Y	N	N	Y	Y	1	NA
Togo	Y	Y	N	Y	N	Y	Y	Y	1	O
Uganda	Y	Y	Y	Y	N	N	Y	N	1	T
United Republic of Tanzania	Y	Y	Y	Y	Y	Y	Y	Y	NA	T
Zambia	N	N	Y	Y	N	Y	Y	N	NA	T
Zimbabwe	N	Y	Y	Y	Y	N	Y	N	NA	T

Treatment facilities for severe mental disorders in primary care	Training facilities for primary care personnel in MH	Total psychiatric beds/ 10 000 population[3]	Psychiatrists/ 100 000 population[4]	Psychiatric nurses/ 100 000 population[5]	Neurologists/ 100 000 population[6]	Neurosurgeons/ 100 000 population[7]	Psychologists working in MH/100 000 population[5]	Social workers working in MH/100 000 population[5]	Special programmes in MH for children	Special programmes in MH for elderly persons	NGOs in MH	MH reporting system	Epidemiological study or data collection system in MH
N	N	2	2	2	2	2	1	1	Y	Y	Y	Y	N
N	N	1	1	1	1	1	1	1	Y	N	Y	N	Y
N	N	1	1	1	1	1	1	1	Y	Y	Y	NA	N
Y	Y	2	1	2	1	1	1	2	N	N	Y	Y	Y
Y	Y	1	1	1	1	1	1	1	Y	N	Y	Y	Y
N	N	1	1	1	1	1	1	2	N	N	Y	N	N
N	N	1	1	1	1	1	1	1	N	N	Y	N	N
Y	Y	1	1	NA	NA	NA	1	1	N	N	Y	Y	N
Y	N	1	1	1	1	1	1	1	Y	N	Y	N	Y
N	N	1	1	1	1	1	1	1	N	N	Y	Y	Y
N	N	1	1	1	1	1	1	1	N	N	N	N	N
N	N	1	1	1	2	1	1	NA	N	N	Y	N	N
Y	Y	1	1	1	1	1	1	1	N	N	Y	Y	N
Y	Y	1	1	1	1	1	1	1	Y	Y	Y	N	Y
N	N	1	1	1	1	1	1	1	N	N	Y	N	N
Y	N	1	1	1	1	1	1	1	N	N	Y	Y	N
Y	Y	1	1	1	1	1	1	1	N	N	N	Y	Y
Y	N	1	1	1	2	2	1	2	N	N	Y	N	N
Y	Y	1	1	1	1	1	1	1	Y	N	Y	N	N
Y	Y	2	1	2	1	1	1	1	N	N	Y	N	Y
N	N	1	1	1	1	1	1	1	N	N	Y	N	N
N	Y	1	1	1	1	1	1	1	Y	Y	Y	N	N
N	N	1	1	2	1	1	1	1	N	N	Y	N	N
Y	Y	2	1	2	1	1	1	1	Y	Y	Y	Y	Y
Y	Y	1	1	1	1	1	1	1	N	N	Y	Y	N
Y	Y	1	1	1	1	1	1	1	Y	N	Y	Y	N
Y	Y	1	1	2	1	1	1	1	N	N	Y	Y	N
Y	Y	1	1	1	1	1	1	1	N	N	Y	Y	N
N	N	1	1	1	1	1	1	1	N	N	Y	N	N
Y	Y	3	1	2	1	2	1	1	Y	Y	Y	Y	Y
N	N	1	1	1	1	1	1	1	N	N	Y	N	N
N	N	2	1	1	1	1	2	2	Y	N	Y	Y	Y
N	N	1	1	1	1	1	1	1	N	N	Y	Y	N
Y	Y	1	1	2	1	1	1	1	Y	Y	Y	Y	Y
Y	Y	1	1	1	1	1	1	1	N	N	Y	N	Y
Y	N	2	1	1	2	3	1	1	N	N	Y	N	Y
Y	Y	1	1	1	1	1	1	1	Y	N	Y	Y	Y
N	Y	3	1	2	2	1	1	3	Y	Y	Y	Y	Y
N	N	1	1	1	1	1	1	1	N	N	Y	N	NA
Y	Y	2	2	2	2	2	2	3	Y	N	Y	NA	Y
N	N	2	1	2	1	1	1	1	N	N	Y	N	N
Y	Y	1	1	1	1	1	1	1	N	N	Y	Y	N
N	Y	1	1	2	1	1	1	1	Y	N	Y	Y	Y
Y	Y	1	1	2	1	1	1	1	N	N	Y	N	N
Y	Y	1	1	2	1	1	1	1	N	N	Y	Y	Y
Y	Y	2	1	2	1	1	1	1	N	N	Y	Y	Y

Region of the Americas

	MH policy	National mental health programme	Community care in MH	Law in the field of MH	Disability benefits in MH	Substance abuse policy	Therapeutic drug policy/ Essential list of drugs	Specified budget for MH	Specified budget for MH as a proportion of total health budget[1]	Primary method of financing MH care[2]	MH in primary
Antigua and Barbuda	N	Y	Y	Y	N	N	Y	Y	2	S	
Argentina	Y	Y	Y	Y	Y	Y	N	Y	NA	T	
Bahamas	N	N	Y	NA	Y	N	Y	Y	4	T	
Barbados	N	Y	Y	Y	Y	Y	Y	Y	4	T	
Belize	N	N	Y	Y	Y	N	Y	Y	2	T	
Bolivia	Y	Y	Y	N	Y	Y	Y	Y	1	O	
Brazil	Y	Y	Y	Y	Y	Y	Y	Y	2	T	
Canada	Y	N	Y	Y	Y	Y	N	Y	4	T	
Chile	Y	Y	Y	Y	Y	Y	Y	Y	2	S	
Colombia	Y	Y	Y	Y	Y	Y	Y	Y	1	S	
Costa Rica	Y	N	Y	Y	Y	Y	Y	Y	NA	S	
Cuba	Y	Y	Y	Y	Y	Y	Y	Y	NA	T	
Dominica	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	N
Dominican Republic	Y	Y	Y	NA	Y	Y	Y	N	NA	O	
Ecuador	N	Y	N	N	Y	Y	Y	Y	NA	O	
El Salvador	Y	Y	N	N	Y	N	Y	Y	NA	T	
Grenada	N	Y	Y	Y	N	N	Y	Y	3	T	
Guatemala	Y	Y	Y	N	Y	Y	Y	Y	1	T	
Guyana	N	N	N	N	Y	N	Y	Y	NA	T	
Haiti	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	N
Honduras	N	Y	N	N	Y	Y	Y	Y	NA	NA	
Jamaica	Y	Y	Y	Y	Y	Y	Y	Y	2	T	
Mexico	Y	Y	N	Y	Y	Y	Y	Y	1	T	
Nicaragua	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	N
Panama	Y	Y	Y	NA	Y	Y	Y	N	NA	T	
Paraguay	N	Y	N	N	Y	N	N	Y	1	O	
Peru	Y	Y	Y	N	N	Y	NA	Y	NA	T	
Saint Kitts and Nevis	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	N
Saint Lucia	N	N	N	Y	N	N	Y	Y	2	T	
Saint Vincent and the Grenadines	Y	Y	Y	Y	Y	Y	Y	Y	2	T	
Suriname	Y	Y	N	Y	Y	Y	Y	Y	2	T	
Trinidad and Tobago	Y	Y	Y	Y	Y	N	Y	NA	NA	T	
United States of America	N	Y	Y	Y	Y	Y	N	Y	3	P	
Uruguay	Y	Y	Y	Y	Y	Y	Y	Y	NA	S	
Venezuela, Bolivarian Republic of	Y	Y	N	N	Y	Y	Y	Y	NA	T	

Eastern Mediterranean Region

Afghanistan	Y	Y	N	Y	Y	Y	Y	Y	NA	O	
Bahrain	Y	Y	Y	Y	Y	Y	Y	Y	NA	T	
Cyprus	Y	Y	Y	Y	Y	Y	Y	Y	3	T	
Djibouti	N	N	N	N	N	N	Y	N	NA	G	
Egypt	Y	Y	N	Y	Y	Y	Y	Y	3	T	
Iran, Islamic Republic of	Y	Y	Y	N	N	Y	Y	Y	2	T	
Iraq	Y	Y	Y	Y	Y	Y	Y	Y	NA	T	
Jordan	N	Y	N	Y	Y	Y	Y	N	NA	T	

Treatment facilities for severe mental disorders in primary care	Training facilities for primary care personnel in MH	Total psychiatric beds/ 10 000 population[3]	Psychiatrists/ 100 000 population[4]	Psychiatric nurses/ 100 000 population[5]	Neurologists/ 100 000 population[6]	Neurosurgeons/ 100 000 population[7]	Psychologists working in MH/100 000 population[5]	Social workers working in MH/100 000 population[5]	Special programmes in MH for children	Special programmes in MH for elderly persons	NGOs in MH	MH reporting system	Epidemiological study or data collection system in MH
Y	N	4	2	2	1	1	2	NA	Y	N	Y	N	N
Y	N	3	4	NA	3	4	NA	3	Y	Y	Y	N	Y
Y	N	4	2	3	NA	NA	2	2	Y	Y	Y	Y	N
Y	N	4	4	4	NA	NA	1	2	Y	Y	Y	Y	Y
N	N	2	2	1	2	3	1	2	N	N	Y	N	N
Y	N	2	1	NA	2	3	2	NA	Y	Y	Y	N	N
N	N	2	2	NA	NA	NA	NA	NA	Y	Y	Y	Y	Y
Y	Y	4	4	3	NA	NA	3	NA	Y	Y	N	Y	Y
Y	N	2	2	1	2	2	2	2	Y	Y	Y	Y	Y
Y	Y	2	2	1	NA	NA	NA	NA	Y	Y	Y	Y	Y
N	Y	2	2	2	3	3	3	3	Y	Y	Y	Y	Y
Y	Y	3	3	2	NA	4	2	3	Y	Y	Y	Y	Y
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Y	Y	1	2	1	2	2	3	NA	Y	Y	Y	Y	N
Y	Y	2	1	1	NA	NA	1	1	N	N	Y	Y	N
Y	N	1	1	1	NA	NA	3	NA	N	N	Y	Y	Y
Y	N	4	1	2	NA	NA	1	2	Y	Y	N	Y	N
Y	Y	1	1	1	1	NA	1	1	Y	N	Y	N	Y
N	N	2	1	1	NA	NA	1	1	N	N	N	N	N
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N	N	1	1	1	2	2	2	3	N	Y	Y	Y	Y
Y	Y	2	1	2	NA	NA	1	1	Y	N	Y	Y	Y
Y	Y	1	2	1	3	4	NA	1	Y	Y	Y	Y	Y
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Y	N	2	2	2	2	3	2	1	Y	Y	Y	N	Y
Y	N	1	2	NA	2	2	NA	NA	Y	Y	Y	Y	Y
N	Y	1	2	NA	NA	NA	NA	NA	Y	N	Y	N	N
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N	N	4	2	2	NA	NA	1	1	Y	Y	Y	N	N
Y	Y	4	1	3	NA	NA	2	2	N	Y	Y	Y	N
N	N	3	2	3	NA	NA	1	1	N	N	Y	N	N
NA	Y	3	1	3	NA	2	1	2	N	Y	Y	Y	Y
N	N	3	4	2	3	4	3	3	Y	Y	Y	Y	Y
Y	Y	3	4	1	NA	NA	3	4	Y	Y	Y	Y	Y
N	N	2	NA	NA	NA	NA	NA	NA	Y	N	Y	Y	N
N	N	1	1	1	1	1	1	1	N	N	N	N	N
Y	Y	2	2	3	2	2	1	1	Y	Y	Y	Y	Y
Y	Y	3	2	3	3	4	3	3	Y	Y	Y	Y	N
N	N	1	1	1	1	1	1	1	N	N	N	Y	N
N	Y	2	1	2	2	2	1	1	Y	Y	Y	Y	N
Y	Y	2	1	1	2	2	2	1	N	N	Y	Y	N
Y	Y	1	1	1	1	1	1	1	Y	Y	Y	Y	Y
Y	N	1	1	1	2	2	1	2	Y	Y	Y	Y	Y

	MH policy	National mental health programme	Community care in MH	Law in the field of MH	Disability benefits in MH	Substance abuse policy	Therapeutic drug policy/ Essential list of drugs	Specified budget for MH	Specified budget for MH as a proportion of total health budget[1]	Primary method of financing MH care[2]	MH in primary
Kuwait	Y	Y	Y	N	Y	Y	Y	Y	NA	S	
Lebanon	N	Y	N	N	N	N	Y	N	NA	T	
Libyan Arab Jamahiriya	N	Y	N	Y	NA	NA	NA	NA	NA	NA	
Morocco	Y	Y	Y	Y	Y	Y	Y	Y	NA	T	
Oman	Y	Y	Y	N	Y	Y	Y	Y	NA	T	
Pakistan	Y	Y	Y	Y	Y	Y	Y	Y	1	O	
Qatar	Y	Y	Y	N	Y	Y	Y	Y	1	O	
Saudi Arabia	Y	Y	Y	N	Y	Y	Y	Y	NA	T	
Somalia	N	N	N	N	N	N	N	N	NA	NA	
Sudan	Y	Y	N	Y	Y	Y	Y	Y	NA	T	
Syrian Arab Republic	N	N	N	Y	Y	Y	Y	Y	NA	NA	
Tunisia	Y	Y	Y	Y	N	Y	Y	Y	NA	T	
United Arab Emirates	N	Y	Y	NA	NA	Y	Y	NA	NA	NA	
Yemen	Y	Y	N	N	Y	N	Y	Y	NA	O	

European Region

Albania	N	Y	N	Y	Y	N	Y	Y	2	T	
Andorra	N	N	Y	N	Y	N	N	Y	2	S	
Armenia	Y	N	Y	Y	Y	Y	Y	Y	2	T	
Austria	Y	N	Y	Y	Y	Y	N	N	NA	S	
Azerbaijan	N	N	Y	NA	Y	Y	Y	Y	2	T	
Belarus	N	N	N	Y	Y	Y	Y	N	NA	T	
Belgium	Y	Y	Y	Y	Y	Y	Y	Y	3	S	
Bosnia and Herzegovinia	Y	Y	Y	Y	Y	N	Y	N	NA	S	
Bulgaria	Y	Y	N	Y	Y	Y	Y	Y	2	T	
Croatia	N	N	Y	Y	Y	Y	Y	Y	NA	S	
Czech Republic	Y	Y	Y	Y	Y	Y	Y	Y	2	S	
Denmark	Y	Y	Y	Y	Y	Y	N	Y	NA	T	
Estonia	N	N	N	Y	Y	Y	Y	N	NA	S	
Finland	Y	Y	Y	Y	Y	Y	N	Y	NA	T	
France	Y	Y	Y	Y	Y	Y	Y	Y	2	S	
Georgia	Y	Y	N	Y	Y	Y	Y	Y	NA	T	
Germany	Y	Y	Y	Y	Y	Y	NA	Y	NA	S	
Greece	Y	Y	Y	Y	Y	Y	Y	N	NA	T	
Hungary	N	Y	Y	Y	Y	Y	Y	Y	3	S	
Iceland	Y	Y	N	Y	Y	Y	N	N	NA	S	
Ireland	Y	Y	Y	Y	Y	Y	Y	Y	3	S	
Israel	Y	N	Y	Y	Y	Y	Y	Y	3	T	
Italy	Y	Y	Y	Y	Y	Y	Y	Y	NA	T	
Kazakhstan	Y	N	NA	Y	Y	Y	Y	Y	3	T	
Kyrgyzstan	Y	Y	N	Y	Y	Y	Y	Y	3	T	
Latvia	Y	Y	Y	Y	Y	Y	Y	Y	2	T	
Lithuania	Y	Y	Y	Y	Y	Y	Y	Y	3	S	
Luxembourg	Y	Y	Y	Y	Y	Y	Y	Y	4	S	
Malta	Y	N	Y	Y	Y	N	Y	Y	3	T	
Monaco	N	N	N	Y	Y	Y	N	N	NA	S	
Netherlands	Y	Y	Y	Y	Y	Y	Y	Y	3	S	

Treatment facilities for severe mental disorders in primary care	Training facilities for primary care personnel in MH	Total psychiatric beds/ 10 000 population[3]	Psychiatrists/ 100 000 population[4]	Psychiatric nurses/ 100 000 population[5]	Neurologists/ 100 000 population[6]	Neurosurgeons/ 100 000 population[7]	Psychologists working in MH/100 000 population[5]	Social workers working in MH/100 000 population[5]	Special programmes in MH for children	Special programmes in MH for elderly persons	NGOs in MH	MH reporting system	Epidemiological study or data collection system in MH
Y	Y	2	2	3	NA	NA	1	1	Y	Y	Y	Y	Y
N	N	3	2	2	3	3	1	2	N	N	Y	Y	N
NA	Y	2	1	NA	NA	NA	1	1	Y	Y	NA	NA	Y
Y	Y	1	1	2	2	2	1	1	Y	N	Y	Y	Y
N	Y	1	2	2	2	2	1	1	Y	Y	Y	Y	Y
Y	Y	1	1	1	1	2	1	1	Y	N	Y	N	Y
N	Y	1	2	2	2	3	1	2	Y	Y	Y	Y	Y
Y	Y	2	2	3	1	2	1	2	Y	N	Y	Y	Y
N	N	1	1	1	NA	NA	1	1	N	N	Y	N	N
N	Y	1	1	1	1	1	1	1	Y	N	N	Y	N
N	Y	1	1	1	2	3	1	1	N	Y	N	N	N
N	Y	2	2	1	2	2	1	NA	Y	Y	Y	N	Y
NA	Y	2	2	3	NA	NA	1	2	Y	Y	NA	NA	Y
Y	Y	1	1	1	1	1	1	1	N	N	Y	Y	N
N	N	2	1	NA	2	NA	1	1	Y	N	Y	N	N
N	N	2	1	NA	2	NA	1	1	Y	N	Y	N	N
Y	Y	2	3	2	3	1	3	3	Y	Y	Y	Y	Y
N	N	2	2	1	4	4	1	1	Y	N	Y	Y	Y
Y	Y	3	3	3	4	4	3	4	Y	Y	Y	Y	Y
Y	N	3	2	2	4	2	1	1	N	N	Y	Y	Y
Y	Y	3	4	3	4	3	1	1	Y	N	N	Y	N
Y	Y	4	4	NA	2	3	NA	NA	Y	Y	Y	Y	Y
Y	Y	2	2	2	2	1	1	1	Y	N	Y	Y	N
N	Y	3	3	3	4	4	1	1	Y	N	Y	Y	Y
Y	Y	4	3	NA	3	3	NA	NA	Y	Y	Y	Y	Y
Y	Y	4	4	3	4	4	2	NA	Y	Y	Y	Y	Y
Y	N	4	4	4	3	4	4	2	Y	Y	Y	Y	Y
N	Y	4	4	1	4	3	NA	NA	N	N	Y	Y	N
Y	N	4	4	4	3	3	4	4	Y	Y	Y	Y	Y
Y	Y	4	4	NA	NA	NA	NA	NA	Y	Y	Y	Y	Y
N	N	2	3	3	NA	NA	NA	NA	Y	N	Y	Y	N
Y	N	3	3	4	3	4	NA	NA	Y	Y	Y	Y	Y
Y	N	3	3	2	3	4	3	4	Y	Y	Y	N	N
N	Y	3	3	3	4	3	2	1	Y	Y	Y	Y	Y
Y	Y	2	4	3	4	4	4	4	Y	Y	Y	Y	Y
Y	Y	4	3	4	2	2	2	3	Y	Y	Y	Y	Y
Y	Y	3	4	2	4	4	3	2	Y	Y	Y	Y	Y
Y	NA	2	3	3	NA	NA	2	2	Y	Y	Y	N	Y
N	Y	3	3	NA	4	3	1	NA	NA	NA	N	Y	Y
N	Y	3	2	3	4	3	1	NA	N	N	Y	Y	Y
Y	Y	4	3	3	4	4	1	1	Y	Y	Y	Y	Y
N	Y	4	4	3	4	4	2	NA	N	N	Y	Y	Y
Y	Y	4	4	3	3	3	3	3	Y	Y	Y	Y	Y
Y	N	4	2	3	2	3	2	2	N	N	Y	N	N
Y	NA	4	4	NA	3	1	3	3	N	Y	N	Y	N
Y	Y	4	3	4	3	3	3	4	Y	Y	Y	Y	Y

	MH policy	National mental health programme	Community care in MH	Law in the field of MH	Disability benefits in MH	Substance abuse policy	Therapeutic drug policy/ Essential list of drugs	Specified budget for MH	Specified budget for MH as a proportion of total health budget[1]	Primary method of financing MH care[2]	MH in primary
Norway	Y	Y	Y	Y	Y	Y	Y	Y	1	S	Y
Poland	Y	Y	Y	Y	Y	Y	Y	N	NA	S	Y
Portugal	Y	Y	Y	Y	Y	Y	Y	Y	NA	T	Y
Republic of Moldova	Y	N	N	Y	Y	Y	Y	Y	3	T	Y
Romania	N	Y	N	N	Y	Y	Y	Y	2	S	Y
Russian Federation	Y	Y	Y	Y	Y	Y	Y	N	NA	T	Y
San Marino	N	N	Y	Y	Y	N	N	N	NA	T	Y
Slovakia	N	N	Y	Y	Y	Y	N	Y	2	S	Y
Slovenia	N	N	Y	Y	Y	N	Y	N	NA	T	Y
Spain	Y	N	Y	Y	Y	Y	Y	N	NA	T	Y
Sweden	N	N	Y	Y	Y	N	N	Y	4	T	Y
Switzerland	N	N	Y	Y	Y	Y	N	N	NA	S	Y
Tajikistan	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
The former Yugoslav Republic of Macedonia	N	N	Y	N	Y	Y	Y	Y	NA	S	Y
Turkey	Y	Y	N	N	Y	Y	Y	N	NA	S	Y
Turkmenistan	Y	N	NA	Y	Y	Y	Y	N	NA	NA	Y
Ukraine	Y	N	N	Y	Y	Y	Y	N	NA	T	Y
United Kingdom	Y	Y	Y	Y	Y	Y	Y	Y	3	T	Y
Uzbekistan	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Yugoslavia	N	N	N	Y	N	Y	Y	Y	NA	S	Y

South-East Asia Region

Bangladesh	N	Y	Y	Y	Y	Y	Y	Y	1	T	Y
Bhutan	Y	Y	Y	N	Y	Y	Y	Y	1	T	Y
Democratic People's Republic of Korea	Y	Y	Y	Y	Y	Y	Y	Y	NA	T	Y
India	Y	Y	Y	Y	Y	N	Y	Y	1	T	Y
Indonesia	Y	Y	N	Y	Y	Y	Y	Y	1	O	Y
Maldives	N	N	N	N	Y	Y	Y	N	NA	O	N
Myanmar	Y	Y	Y	Y	Y	Y	Y	Y	2	T	Y
Nepal	Y	N	N	Y	Y	Y	Y	Y	1	O	N
Sri Lanka	N	Y	N	Y	N	N	Y	Y	2	T	Y
Thailand	Y	Y	N	N	Y	Y	Y	Y	2	T	Y

Western Pacific Region

Australia	Y	Y	Y	Y	Y	Y	Y	Y	3	T	Y
Brunei Darussalam	N	N	Y	Y	Y	Y	Y	N	NA	T	N
Cambodia	N	N	Y	N	N	Y	Y	Y	NA	G	Y
China	Y	Y	Y	N	Y	Y	Y	Y	2	O	Y
Cook Islands	N	N	Y	Y	Y	N	Y	N	NA	T	Y
Fiji	Y	Y	Y	Y	Y	Y	Y	Y	2	T	Y
Japan	Y	Y	Y	Y	Y	Y	N	Y	1	T	Y
Kiribati	Y	Y	N	N	N	N	NA	N	2	T	Y
Lao People's Democratic Republic	N	N	N	NA	Y	N	Y	N	NA	O	N
Malaysia	Y	Y	Y	Y	N	Y	Y	Y	2	T	Y

Treatment facilities for severe mental disorders in primary care	Training facilities for primary care personnel in MH	Total psychiatric beds/ 10 000 population[3]	Psychiatrists/ 100 000 population[4]	Psychiatric nurses/ 100 000 population[5]	Neurologists/ 100 000 population[6]	Neurosurgeons/ 100 000 population[7]	Psychologists working in MH/100 000 population[5]	Social workers working in MH/100 000 population[5]	Special programmes in MH for children	Special programmes in MH for elderly persons	NGOs in MH	MH reporting system	Epidemiological study or data collection system in MH
Y	Y	4	4	3	3	3	4	NA	Y	Y	Y	Y	Y
N	Y	3	3	3	4	NA	2	1	Y	Y	Y	Y	Y
Y	Y	3	2	2	3	3	2	2	Y	Y	Y	Y	Y
N	Y	3	3	3	4	3	1	1	N	N	Y	Y	N
N	N	3	2	NA	3	3	NA	NA	Y	Y	Y	Y	N
N	Y	4	4	4	3	4	1	1	N	Y	Y	Y	Y
Y	N	2	4	1	4	1	4	4	Y	Y	N	Y	Y
Y	N	3	3	3	4	3	2	NA	N	N	Y	Y	Y
Y	Y	4	3	NA	NA	NA	2	NA	Y	Y	Y	Y	Y
N	N	2	2	2	3	3	2	NA	Y	N	Y	Y	N
Y	N	3	4	3	3	3	4	NA	Y	Y	Y	Y	Y
Y	N	4	4	NA	3	3	3	NA	Y	Y	Y	N	N
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N	N	4	3	3	NA	NA	2	2	Y	N	Y	Y	N
Y	Y	2	1	NA	2	3	1	1	Y	N	Y	Y	Y
N	Y	2	2	NA	3	2	1	NA	N	N	Y	Y	Y
N	N	3	3	3	4	NA	NA	NA	Y	N	Y	Y	Y
Y	Y	3	4	4	2	3	2	4	N	Y	Y	Y	Y
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Y	N	3	3	3	4	NA	2	1	Y	Y	Y	Y	Y
Y	Y	1	1	1	1	1	1	1	Y	Y	Y	Y	Y
Y	Y	1	1	1	1	1	1	1	N	N	N	Y	Y
NA	Y	NA	NA	NA	NA	NA	NA	NA	Y	Y	Y	Y	Y
Y	Y	1	1	1	1	1	1	1	N	Y	Y	Y	N
Y	Y	1	1	1	1	1	1	2	Y	Y	Y	Y	N
N	Y	NA	1	1	1	2	2	1	N	N	N	N	N
N	Y	1	1	1	1	1	1	1	Y	Y	Y	Y	Y
N	N	1	1	1	1	1	1	NA	N	N	Y	Y	N
N	Y	2	1	2	1	1	1	1	Y	N	Y	Y	N
N	Y	2	1	3	2	2	1	1	Y	Y	Y	Y	Y
Y	Y	2	4	4	3	3	2	2	Y	Y	Y	Y	Y
N	N	2	2	1	2	3	NA	NA	N	N	Y	Y	N
Y	Y	1	1	1	1	1	1	1	Y	N	Y	Y	N
N	Y	1	1	2	NA	NA	NA	NA	N	N	Y	N	Y
Y	N	1	1	2	1	1	1	1	N	N	Y	Y	N
N	Y	2	1	NA	NA	1	NA	NA	N	N	Y	Y	Y
N	N	4	3	4	3	4	NA	2	Y	Y	Y	Y	Y
N	N	3	1	1	1	1	1	1	N	N	Y	Y	N
N	N	1	1	1	1	1	1	1	NA	NA	Y	N	N
Y	Y	2	1	1	1	1	1	1	Y	Y	Y	Y	Y

	MH policy	National mental health programme	Community care in MH	Law in the field of MH	Disability benefits in MH	Substance abuse policy	Therapeutic drug policy/ Essential list of drugs	Specified budget for MH	Specified budget for MH as a proportion of total health budget[1]	Primary method of financing MH care[2]	MH in primary
Marshall Islands	N	Y	Y	Y	Y	NA	N	Y	1	S	Y
Micronesia, Federated States of	Y	Y	Y	NA	Y	Y	Y	Y	3	G	Y
Mongolia	N	N	Y	Y	Y	Y	Y	Y	2	T	Y
Nauru	N	N	N	Y	N	N	Y	N	NA	T	N
New Zealand	Y	Y	Y	Y	Y	Y	Y	Y	4	T	Y
Niue	N	N	N	Y	Y	N	Y	N	NA	T	N
Palau	N	Y	Y	Y	N	N	N	N	2	T	Y
Papua New Guinea	Y	Y	N	Y	N	N	Y	Y	1	T	N
Philippines	Y	Y	N	N	Y	Y	Y	Y	1	T	Y
Republic of Korea	Y	Y	Y	Y	Y	Y	Y	N	2	S	Y
Samoa	N	N	Y	Y	N	N	Y	N	NA	T	Y
Singapore	Y	Y	Y	Y	Y	Y	Y	Y	3	T	Y
Solomon Islands	N	Y	N	Y	N	N	Y	Y	2	T	Y
Tonga	N	N	Y	Y	N	N	Y	Y	1	T	Y
Tuvalu	Y	N	N	Y	N	N	N	N	NA	T	Y
Vanuatu	N	N	N	N	NA	N	Y	N	NA	NA	N
Vietnam	N	Y	Y	N	Y	Y	Y	Y	NA	O	Y

Y = yes, N = no, NA = information not available, MH = Mental Health

[1] 1 = 0-1%, 2 = 1.01-5%, 3 = 5.01-10%, 4 = >10%

[2] O = out-of-pocket payment, G = external grants, T = tax-based, S = social insurance, P = private insurance,

[3] 1 = 0-1, 2 = 1.01-5, 3 = 5.01-10, 4 = >10

[4] 1 = 0-1, 2 = 1.01-5, 3 = 5.01-10, 4 = >10

[5] 1 = 0-1, 2 = 1.01-10, 3 = 10.01-50, 4 = >50

[6] 1 = 0-0.1, 2 = 0.11-1, 3 = 1.01-5, 4 = >5

[7] 1 = 0-0.1, 2 = 0.11-0.5, 3 = 0.51-1, 4 = >1

Treatment facilities for severe mental disorders in primary care	Y	N	Y	Y	N	Y	Y	N	N	Y	Y	N	Y	N	Y	Y
Training facilities for primary care personnel in MH	N	N	N	Y	Y	Y	N	Y	Y	Y	N	N	Y	N	Y	Y
Total psychiatric beds/ 10 000 population[3]	1	1	2	2	1	3	1	4	1	1	2	1	4	1	2	1
Psychiatrists/ 100 000 population[4]	1	NA	1	1	1	2	1	2	1	1	2	1	3	1	2	1
Psychiatric nurses/ 100 000 population[5]	2	1	1	1	2	3	1	2	1	2	2	1	4	1	2	1
Neurologists/ 100 000 population[6]	2	NA	1	1	1	2	1	3	2	1	1	1	NA	1	4	1
Neurosurgeons/ 100 000 population[7]	1	NA	1	1	1	2	1	4	2	1	1	1	2	1	2	1
Psychologists working in MH/100 000 population[5]	1	NA	1	1	1	2	1	1	1	1	1	1	3	1	2	1
Social workers working in MH/100 000 population[5]	1	NA	1	2	1	3	1	2	1	1	2	1	NA	1	2	2
Special programmes in MH for children	N	N	N	Y	N	N	Y	N	Y	N	N	N	Y	N	Y	Y
Special programmes in MH for elderly persons	N	N	N	Y	N	N	Y	N	Y	N	N	N	Y	N	Y	Y
NGOs in MH	N	N	Y	Y	N	Y	Y	N	Y	Y	Y	N	Y	N	Y	Y
MH reporting system	Y	Y	N	Y	N	Y	Y	Y	N	N	Y	Y	Y	N	Y	Y
Epidemiological study or data collection system in MH	Y	N	N	Y	N	Y	Y	Y	N	N	Y	N	N	N	Y	Y

	MH policy	National mental health programme	Community care in MH	Law in the field of MH	Disability benefits in MH	Substance abuse policy	Therapeutic drug policy/ Essential list of drugs	Specified budget for MH	Specified budget for MH as a proportion of total health budget[1]	Primary method of financing MH care[2]	MH in primary health care
Region of the Americas											
British Virgin Islands	N	N	Y	Y	Y	N	Y	Y	NA	T	N
Western Pacific Region											
American Samoa	Y	Y	N	Y	Y	Y	Y	Y	NA	G	Y
French Polynesia	N	N	N	NA	Y	Y	N	Y	NA	T	Y
Guam	Y	N	NA	Y	Y	Y	N	Y	NA	T	N
Hong Kong, China	Y	Y	Y	Y	Y	Y	N	N	NA	T	Y
Macao, China	Y	N	N	Y	Y	Y	Y	N	NA	T	N
New Caledonia	N	N	Y	NA	Y	N	N	Y	NA	S	Y
Northern Mariana Islands, Commonwealth of the	Y	Y	Y	Y	Y	Y	N	Y	NA	T	Y
Tokelau	N	N	Y	N	N	N	Y	N	NA	T	Y
Wallis and Futuna	N	N	N	N	N	N	N	N	NA	G	Y

This table includes only those Associate Members and WHO Areas who responded to the questionnaire.

Y = yes, N = no, NA = information not available, MH = Mental Health

[1] 1 = 0-1%, 2 = 1.01-5%, 3 = 5.01-10%, 4 = >10%

[2] O = out-of-pocket payment, T = tax-based, S = social insurance, P = private insurance, G = external grants

[3] 1 = 0-1, 2 = 1.01-5, 3 = 5.01-10, 4 = >10

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[5] 1 = 0-1, 2 = 1.01-10, 3 = 10.01-50, 4 = >50

[6] 1 = 0-0.1, 2 = 0.11-1, 3 = 1.01-5, 4 = >5

[7] 1 = 0-0.1, 2 = 0.11-0.5, 3 = 0.51-1, 4 = >1

Treatment facilities for severe mental disorders in primary care	Training facilities for primary care personnel in MH	Total psychiatric beds/ 10 000 population[3]	Psychiatrists/ 100 000 population[4]	Psychiatric nurses/ 100 000 population[5]	Neurologists/ 100 000 population[6]	Neurosurgeons/ 100 000 population[7]	Psychologists working in MH/100 000 population[5]	Social workers working in MH/100 000 population[5]	Special programmes in MH for children	Special programmes in MH for elderly persons	NGOs in MH	MH reporting system	Epidemiological study or data collection system in MH
N	N	1	2	3	NA	NA	2	3	N	N	N	Y	N
N	N	1	2	2	1	1	1	NA	Y	Y	Y	Y	N
Y	N	2	2	2	2	2	3	3	Y	Y	Y	Y	N
N	N	2	2	2	3	1	2	3	Y	N	Y	N	N
N	Y	3	2	3	2	2	NA	2	Y	Y	Y	N	Y
N	Y	1	2	2	NA	NA	1	1	Y	N	Y	Y	N
Y	N	4	2	3	2	1	NA	NA	Y	N	N	N	N
Y	N	2	2	2	1	1	2	2	Y	N	Y	Y	Y
N	N	1	1	1	1	1	1	1	N	N	N	Y	N
Y	N	1	1	1	1	1	2	4	N	N	N	N	N

Project ATLAS is aimed at collecting, compiling and disseminating information on mental health resources in the world. This volume presents an alarming picture of deficiency and uneven distribution of resources based on recently collected data from 185 countries. A substantial enhancement in mental health resources is needed urgently to respond to the existing and increasing burden of mental disorders.

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